

# CCR3 Antibody

Catalog # ASC10006

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P51677</a>
<b>Other Accession</b>	<a href="#">NP_847899</a> , <a href="#">30581170</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	41044
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	CCR3 antibody can be used for the detection of CCR3 by Western blot at 1 - 2 $\mu$ g/mL.

## Additional Information

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<b>Gene ID</b>	1232
<b>Other Names</b>	CCR3 Antibody: CKR3, CD193, CMKBR3, CC-CKR-3, C-C chemokine receptor type 3, Eosinophil eotaxin receptor, C-C CKR-3, chemokine (C-C motif) receptor 3
<b>Target/Specificity</b>	CCR3;
<b>Reconstitution &amp; Storage</b>	CCR3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>Precautions</b>	CCR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CCR3
<b>Synonyms</b>	CMKBR3
<b>Function</b>	Receptor for C-C type chemokine. Binds and responds to a variety of chemokines, including CCL11, CCL26, CCL7, CCL13, RANTES(CCL5) and CCL15 (PubMed: <a href="#">7622448</a> , PubMed: <a href="#">8642344</a> , PubMed: <a href="#">8676064</a> ). Subsequently transduces a signal by increasing the intracellular calcium ions level (PubMed: <a href="#">8676064</a> ). In addition acts as a possible functional receptor for NARS1 (PubMed: <a href="#">30171954</a> ).
<b>Cellular Location</b>	Cell membrane; Multi-pass membrane protein

## Tissue Location

In eosinophils as well as trace amounts in neutrophils and monocytes.

## Background

CCR3 Antibody: Human immunodeficiency virus (HIV) and related virus require coreceptors to infect target cells. Some G protein-coupled receptors including CCR5, CXCR4, CCR3, CCR2b, CCR8, GPR15, STRL33, and CX3CR1 in the chemokine receptor family were recently identified as HIV coreceptors. CCR5, CXCR4 and CCR3 are the principal receptors for HIV fusion and entry of target cells. CCR3 facilitates infection by a subset of virus. CCR3 and CCR5 promote efficient infection of microglia, the major target cells in the CNS. High levels of CCR3 and CXCR4 expression were found on the neurons from both the central and peripheral nervous systems. The CCR3 ligand, eotaxin, and an anti-CCR3 antibody inhibited HIV infection of microglia. These results indicate CCR3 plays an important role in HIV infection of CNS.

## References

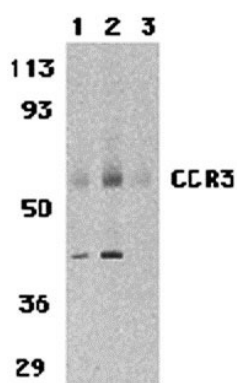
Feng Y, Broder CC, Kennedy PE, et al. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 1996; 272:872-7.

Deng H, Liu R, Ellmeier W, et al. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 1996; 381:661-6.

Choe H, Farzan M, Sun Y, et al. The  $\beta$ -chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. *Cell* 1996; 85:1135-48.

He J, Chen Y, Farzan M, et al. CCR3 and CCR5 are co-receptors for HIV-1 infection of microglia. *Nature* 1997; 385:645-9.

## Images



Western blot analysis of CCR3 in human spleen tissue lysates with CCR3 antibody at 1 (lane 1) and 2  $\mu\text{g}/\text{mL}$  (lane 2), and 2  $\mu\text{g}/\text{mL}$  in the presence of blocking peptide (lane 3).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.