

**CCR3 Antibody**  
Catalog # ASC10004**Specification**

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**CCR3 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">P51677</a>
Other Accession	<a href="#">NP_847899</a> , <a href="#">30581170</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 39, 41 kDa
Application Notes	Observed: 52 kDa KDa CCR3 antibody can be used for the detection of CCR3 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.

**CCR3 Antibody - Additional Information**

Gene ID	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	

**Target/Specificity**

CCR3; At least three isoforms of CCR3 are known to exist; this antibody will detect all three isoforms.

**Reconstitution & Storage**

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.

**Precautions**

CCR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CCR3 Antibody - Protein Information**

**Name** CCR3

**Synonyms** CMKBR3

**Function**

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="http://www.uniprot.org/citations/7622448" target="\_blank">7622448</a>, PubMed:<a href="http://www.uniprot.org/citations/8642344" target="\_blank">8642344</a>, PubMed:<a href="http://www.uniprot.org/citations/8676064" target="\_blank">8676064</a>). Subsequently transduces a signal by increasing the intracellular calcium ions level (PubMed:<a href="http://www.uniprot.org/citations/8676064" target="\_blank">8676064</a>). In addition acts as a possible functional receptor for NARS1 (PubMed:<a href="http://www.uniprot.org/citations/30171954" target="\_blank">30171954</a>).

#### Cellular Location

Cell membrane; Multi-pass membrane protein

#### Tissue Location

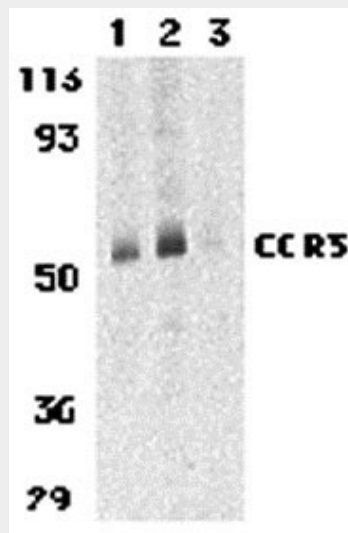
In eosinophils as well as trace amounts in neutrophils and monocytes.

### CCR3 Antibody - Protocols

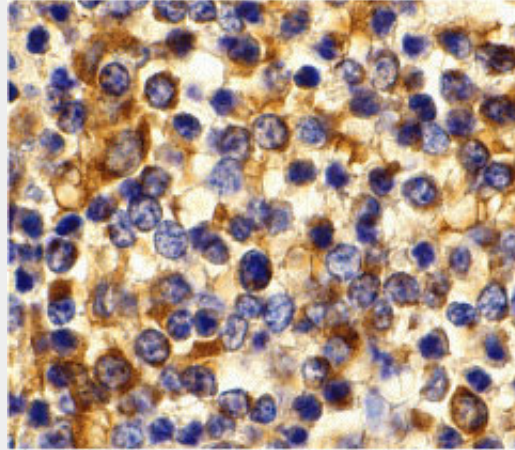
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

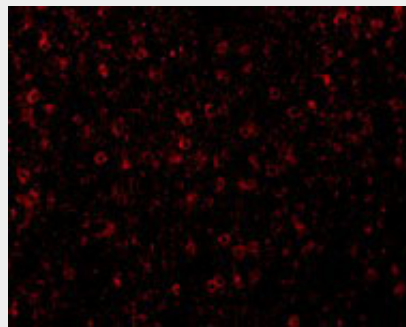
### CCR3 Antibody - Images



Western blot analysis of CCR3 in human spleen tissue lysates with CCR3 antibody at 1 (lane 1) and 2 µg/mL (lane 2), and 2 µg/mL in the presence of blocking peptide (lane 3).



Immunohistochemistry of CCR3 in human spleen tissue with CCR3 antibody at 10 µg/mL.



Immunofluorescence of CCR3 in Human Spleen tissue with CCR3 antibody at 20 µg/mL.

### **CCR3 Antibody - 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.

### **CCR3 Antibody - 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.