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CCR3 Antibody
Catalog # ASC10004

Specification

CCR3 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	P51677
Other Accession	NP_847899, 30581170
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 39, 41 kDa** **Observed: 52 kDa KDa**
Application Notes	**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**

Other Names
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℃ for three months and -20℃, 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:7622448, PubMed:8642344, PubMed:8676064). Subsequently transduces a signal by increasing the intracellular calcium ions level (PubMed:8676064). In addition acts as a possible functional receptor for NARS1 (PubMed:30171954).

Cellular Location
Cell membrane; Multi-pass membrane protein

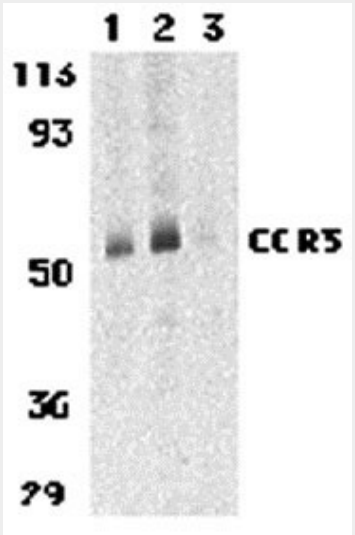
Tissue Location
In eosinophils as well as trace amounts in neutrophils and monocytes.

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 Cytomety
- 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).

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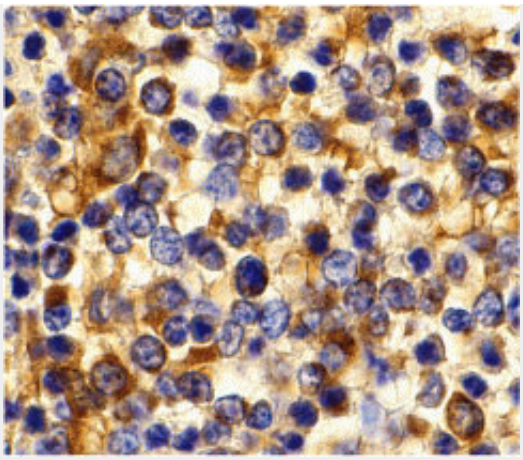
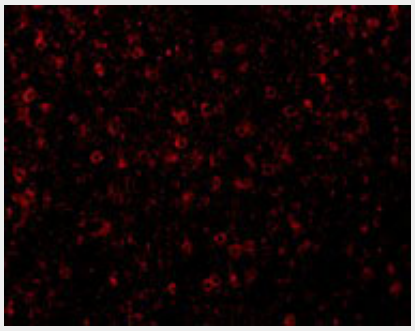


Immunohistochemistry of CCR3 in human spleen tissue with CCR3 antibody at 10 µg/mL.



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 β-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.