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Datasheet for 200-401-AG3

# CCR3 Antibody

## Overview

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| **Description:** | Anti-CCR3 (RABBIT) Antibody - 200-401-AG3 |
| **Item No.:** | 200-401-AG3 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IF, IHC, WB |
| **Reactivity:** | Human, Mouse, Rat |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | 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. |
| **Synonyms:** | CCR3 Antibody, CKR3, CD193, CMKBR3, CC-CKR-3, C-C chemokine receptor type 3, Eosinophil eotaxin receptor, C-C CKR-3 |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | CCR3 |
| **Reactivity:** | Human, Mouse, Rat |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | Anti-CCR3 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide from near the C-terminus of human CCR3. |
| **Purity/Specificity:** | Anti-CCR3 Antibody was Protein A purified from monospecific antiserum by immunoaffinity purification. Cross reactivity with CCR3 from other sources has not been determined. |
| **Relevant Links:** | • UniProtKB - P51677<br>• GeneID - 1232<br>• NCBI - NP_847899 |

## Application Details

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| **Tested Applications:** | ELISA, IF, IHC, WB |
| **Application Note:** | Anti-CCR3 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 41 kDa in Western Blots of specific cell lysates and tissues. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:10,000 - 1:20,000 |
| **IF:** | 20 µg/mL |
| **IHC:** | 10 µg/mL |
| **WB:** | 1-2 µg/mL |

## Formulation

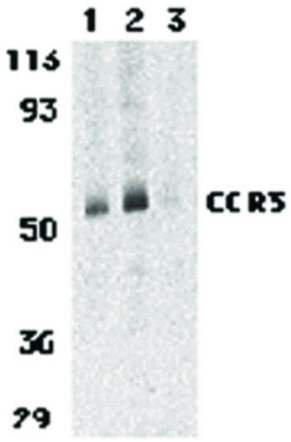
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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1.0 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

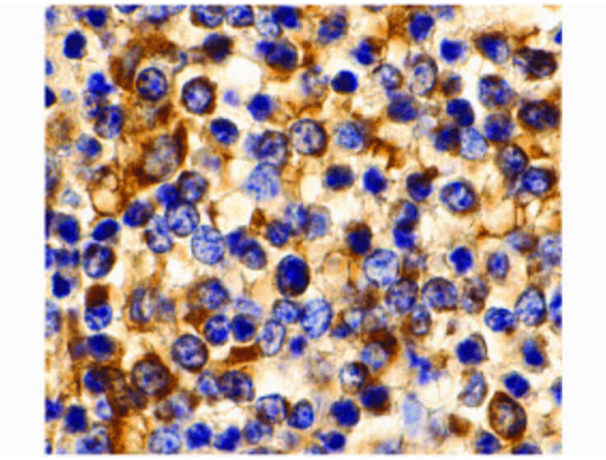
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| **Shipping Condition:** | Wet Ice |

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| **Storage Condition:** | Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

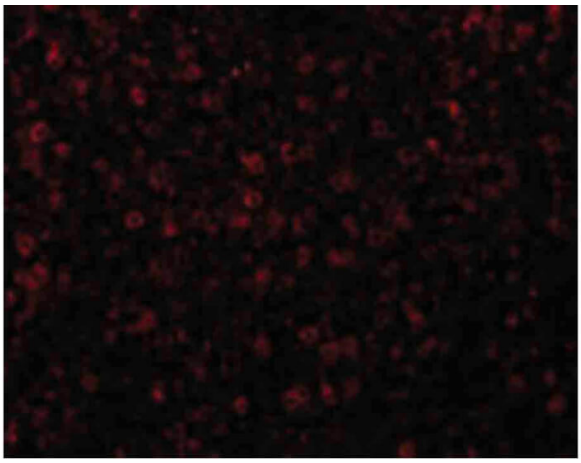
## Images




**Western Blot**
Western Blot of anti-CCR3 antibody. Lane 1: human spleen tissue lysate with CCR3 antibody at 1 µg/mL. Lane 2: human spleen tissue lysate with CCR3 antibody at 2 µg/mL. Lane 3: human spleen tissue lysate with CCR3 antibody at 2 µg/mL in the presence of blocking peptide. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 41 kDa, 51 kDa for CCR3.



**Immunohistochemistry**
Immunohistochemistry of Rabbit anti-CCR3 antibody. Tissue: human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: anti-CCR3 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CCR3 is membrane bound. Staining: CCR3 as precipitated brown signal with hematoxylin purple nuclear counterstain.



**Immunofluorescence Microscopy**
Immunofluorescence Microscopy of Rabbit anti-CCR3 antibody. Tissue: human spleen. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: anti-CCR3 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CCR3 is membrane bound. Staining: CCR3 as red fluorescent signal with bis-benzimide (blue) nuclear counterstain.

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