10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# CCR3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8806c

## Product Information

| | |
|---|---|
| **Application** | WB, FC, E |
| **Primary Accession** | P51677 |
| **Other Accession** | Q9BDS8 |
| **Reactivity** | Human |
| **Predicted** | Monkey |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB22038 |
| **Calculated MW** | 41044 |
| **Antigen Region** | 291-318 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 1232 |
| **Other Names** | C-C chemokine receptor type 3, C-C CKR-3, CC-CKR-3, CCR-3, CCR3, CKR3, Eosinophil eotaxin receptor, CD193, CCR3, CMKBR3 |
| **Target/Specificity** | This CCR3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 291-318 amino acids from the Central region of human CCR3. |
| **Dilution** | WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | CCR3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | CCR3 |
| **Synonyms** | CMKBR3 |

| | |
|---|---|
| **Function** | G protein-coupled receptor (GPCR) that plays a key role in the immune system by regulating the migration and activation of white blood cells in response to chemokines (PubMed:28994588). Selectively interacts with eosinophil-attracting chemokines such as eotaxin/CCL11, eotaxin-2/CCL24 and eotaxin-3/CCL26 (PubMed:7622448, PubMed:8642344, PubMed:8676064). Ligand binding triggers intracellular signaling that leads to chemotaxis of immune cells. Mechanistically, signals through GNA14 or GNA16 to induce stimulation of phospholipase Cbeta/PLCB2 and subsequently chemotaxis (PubMed:18406577). Alternatively, transduces signal via GNAI1 resulting in elevated intracellular calcium levels and activation of the PI3K/AKT pathway (PubMed:8676064, PubMed:35570218). May also act 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. |

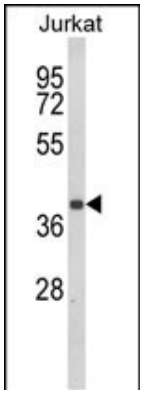
## Background

CCR3 is a receptor for C-C type chemokines. It belongs to family 1 of the G protein-coupled receptors. This receptor binds and responds to a variety of chemokines, including eotaxin (CCL11), eotaxin-3 (CCL26), MCP-3 (CCL7), MCP-4 (CCL13), and RANTES (CCL5). It is highly expressed in eosinophils and basophils, and is also detected in TH1 and TH2 cells, as well as in airway epithelial cells. This receptor may contribute to the accumulation and activation of eosinophils and other inflammatory cells in the allergic airway. It is also known to be an entry co-receptor for HIV-1.

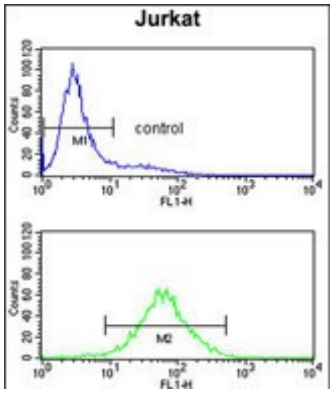
## References

Ponath,P.D., et.al., J. Clin. Invest. 97 (3), 604-612 (1996)

## Images




Western blot analysis of CCR3 Antibody (Center) (Cat. #AP8806c) in Jurkat cell line lysates (35ug/lane). CCR3 (arrow) was detected using the purified Pab.




CCR3 Antibody (Center) (Cat. #AP8806c) flow cytometry analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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