

## CCR2/CKR2 Antibody

Rabbit mAb Catalog # AP90119

## **Specification**

## **CCR2/CKR2 Antibody - Product Information**

Application IHC, FC, IP
Primary Accession P41597
Clonality Monoclonal

**Other Names** 

C-C chemokine receptor type 2; C-C CKR-2; CC chemokine receptor type 2; CC CKR 2; CC-CKR-2;

CCCKR2; CCR 2; CCR-2;; CCR1L;; CCR2;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 41915 Da

# **CCR2/CKR2 Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

CCR2/CKR2

Description Receptor for the MCP-1, MCP-3 and MCP-4

chemokines. Transduces a signal by increasing the intracellular calcium ions level. Alternative coreceptor with CD4 for

HIV-1 infection.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

#### **CCR2/CKR2 Antibody - Protein Information**

Name CCR2

Synonyms CMKBR2

## **Function**

Key functional receptor for CCL2 but can also bind CCL7, and CCL12 (PubMed:<a href="http://www.uniprot.org/citations/23408426" target="\_blank">23408426</a>, PubMed:<a href="http://www.uniprot.org/citations/38157855" target="\_blank">38157855</a>, PubMed:<a href="http://www.uniprot.org/citations/8048929" target="\_blank">8048929</a>, PubMed:<a href="http://www.uniprot.org/citations/8146186" target="\_blank">8146186</a>). Also transduces signaling mediated by CCL13 (PubMed:<a href="http://www.uniprot.org/citations/38157855" target="\_blank">38157855</a>). Its binding with CCL2 on monocytes and macrophages mediates chemotaxis and migration induction through the activation of the PI3K cascade, the small G protein Rac and lamellipodium protrusion (PubMed:<a



 $href="http://www.uniprot.org/citations/38157855" target="\_blank">38157855</a>). Also acts as a receptor for the beta-defensin DEFB106A/DEFB106B (PubMed:<a$ 

href="http://www.uniprot.org/citations/23938203" target="\_blank">23938203</a>). Regulates the expression of T-cell inflammatory cytokines and T-cell differentiation, promoting the differentiation of T-cells into T-helper 17 cells (Th17) during inflammation (By similarity). Facilitates the export of mature thymocytes by enhancing directional movement of thymocytes to sphingosine-1-phosphate stimulation and up-regulation of S1P1R expression; signals through the JAK-STAT pathway to regulate FOXO1 activity leading to an increased expression of S1P1R (By similarity). Plays an important role in mediating peripheral nerve injury-induced neuropathic pain (By similarity). Increases NMDA-mediated synaptic transmission in both dopamine D1 and D2 receptor-containing neurons, which may be caused by MAPK/ERK-dependent phosphorylation of GRIN2B/NMDAR2B (By similarity). Mediates the recruitment of macrophages and monocytes to the injury site following brain injury (By similarity).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Note=The chemoattractant receptors are distributed throughout the cell surface; after stimulation with a ligand, such as CCL2, they are rapidly recruited into microdomain clusters at the cell membrane.

### **Tissue Location**

Expressed by monocytes and IL2-activated NK cells (PubMed:9058802). Abundantly expressed on CD14+/CD16- monocytes and weakly on CD14+/CD16+ monocytes, type 2 dendritic cells (DCs) and plasmacytoid DCs (at protein level) (PubMed:38157855)

## **CCR2/CKR2 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CCR2/CKR2 Antibody - Images