

# CCR2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20915c

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P41597</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB30649
<b>Calculated MW</b>	41915

## Additional Information

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<b>Gene ID</b>	729230
<b>Other Names</b>	C-C chemokine receptor type 2, C-C CKR-2, CC-CKR-2, CCR-2, CCR2, Monocyte chemoattractant protein 1 receptor, MCP-1-R, CD192, CCR2, CMKBR2
<b>Target/Specificity</b>	This CCR2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 336-369 amino acids from the C-terminal region of human CCR2.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	CCR2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CCR2
<b>Synonyms</b>	CMKBR2
<b>Function</b>	Key functional receptor for CCL2 but can also bind CCL7, and CCL12 (PubMed: <a href="#">23408426</a> , PubMed: <a href="#">38157855</a> , PubMed: <a href="#">8048929</a> , PubMed: <a href="#">8146186</a> ). Also transduces signaling mediated by CCL13 (PubMed: <a href="#">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:[38157855](#)). Also acts as a receptor for the beta-defensin DEFB106A/DEFB106B (PubMed:[23938203](#)). 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)

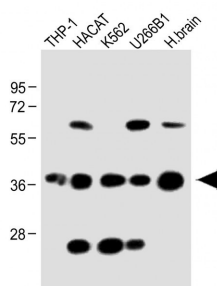
## Background

Receptor for the CCL2, CCL7 and CCL13 chemokines. Transduces a signal by increasing intracellular calcium ion levels. Alternative coreceptor with CD4 for HIV-1 infection.

## References

Charo I.F.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:2752-2756(1994).  
Yamagami S.,et al.Biochem. Biophys. Res. Commun. 202:1156-1162(1994).  
Wong L.-M.,et al.J. Biol. Chem. 272:1038-1045(1997).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Muzny D.M.,et al.Nature 440:1194-1198(2006).

## Images



All lanes : Anti-CCR2 Antibody (C-term) at 1:2000 dilution  
Lane 1: THP-1 whole cell lysate Lane 2: HACAT whole cell lysate Lane 3: K562 whole cell lysate Lane 4: U266B1 whole cell lysate Lane 5: Human brain lysate  
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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