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CCR2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20915c

Product Information

Application	WB, E
Primary Accession	P41597
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30649
Calculated MW	41915

Additional Information

Gene ID	729230
Other Names	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
Target/Specificity	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.
Dilution	WB~~1:1000 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	CCR2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCR2
Synonyms	CMKBR2
Function	Key functional receptor for CCL2 but can also bind CCL7, and CCL12 (PubMed:23408426, PubMed:38157855, PubMed:8048929, PubMed:8146186). Also transduces signaling mediated by CCL13 (PubMed:38157855). 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)

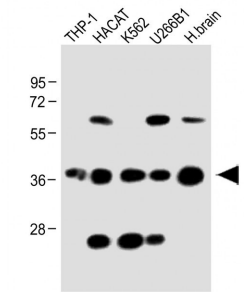
Background

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'.