

CCR2 Rabbit mAb

Catalog # AP77399

Product Information

Application WB, IHC-P, IF, FC, ICC, IP

Primary Accession P41597

Reactivity Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human CCR2/CKR2

Purification Affinity Chromatography

Calculated MW 41915

Additional Information

Gene ID 729230

Other Names CCR2

Dilution WB~~1:1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name CCR2

Synonyms CMKBR2

Function Key functional receptor for CCL2 but can also bind CCL7, and CCL12

(PubMed:<u>23408426</u>, PubMed:<u>38157855</u>, PubMed:<u>8048929</u>, PubMed:<u>8146186</u>). Also transduces signaling mediated by CCL13 (PubMed:<u>38157855</u>). 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:<u>38157855</u>). Also acts as a receptor for the beta-defensin DEFB106A/DEFB106B (PubMed:<u>23938203</u>). 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).

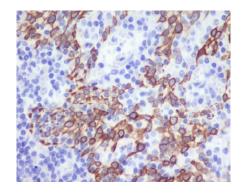
Cellular Location

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)

Images



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