

CD192 Polyclonal Antibody

Catalog # AP73818

Product Information

Application WB
Primary Accession P41597
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 41915

Additional Information

Gene ID 729230

Other Names CCR2; CMKBR2; 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

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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.

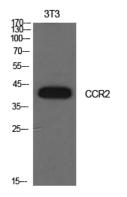
Tissue Location

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)

Background

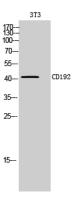
Key functional receptor for CCL2 but can also bind CCL7 and CCL12 (PubMed: <u>8146186</u>, PubMed: <u>8048929</u>, PubMed: <u>23408426</u>). Its binding with CCL2 on monocytes and macrophages mediates chemotaxis and migration induction through the activation of the PI3K cascade, the small G protein Rac and lamellipodium protrusion (Probable). 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). Faciltates 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).

Images



Western Blot analysis of NIH-3T3 cells using CD192 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Western Blot analysis of 3T3 cells using CD192 Polyclonal Antibody. Secondary antibody was diluted at 1:20000



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