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CCR2 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS10462

Specification

CCR2 Antibody (N-Terminus) - Product Information

Application	**IHC**
Primary Accession	P41597
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**42kDa KDa**

CCR2 Antibody (N-Terminus) - 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
Human CCR2. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & 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 (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CCR2 Antibody (N-Terminus) - 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)

Volume
Array

CCR2 Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CCR2 Antibody (N-Terminus) - Images

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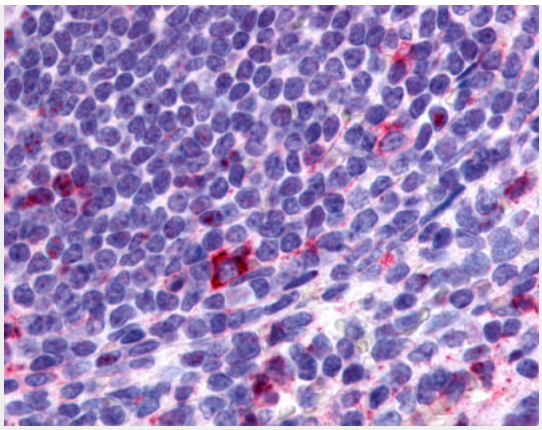

Anti-CCR2 antibody ALS10462 IHC of human spleen, lymphocytes.

CCR2 Antibody (N-Terminus) - 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.

CCR2 Antibody (N-Terminus) - 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).

CCR2 Antibody (N-Terminus) - Citations

- Leukocyte iNOS is required for inflammation and pathological remodeling in ischemic heart failure.