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CCR1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4859a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P32246
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25939
Calculated MW	41173
Antigen Region	1-30

Additional Information

Gene ID	1230
Other Names	C-C chemokine receptor type 1, C-C CKR-1, CC-CKR-1, CCR-1, CCR1, HM145, LD78 receptor, Macrophage inflammatory protein 1-alpha receptor, MIP-1alpha-R, RANTES-R, CD191, CCR1, CMKBR1, CMKR1, SCYAR1
Target/Specificity	This CCR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CCR1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	CCR1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCR1
Synonyms	CMKBR1, CMKR1, SCYAR1

Function	Chemokine receptor that plays a crucial role in regulating immune cell migration, inflammation, and immune responses (PubMed:14991608). Contributes to the inflammatory response by recruiting immune cells, such as monocytes, macrophages, T-cells, and dendritic cells, to sites of inflammation for the clearance of pathogens and the resolution of tissue damage. When activated by its ligands including CCL3, CCL5-9, CCL13-16 and CCL23, triggers a signaling cascade within immune cells, leading to their migration towards the source of the chemokine (PubMed:15905581). For example, mediates neutrophil migration after activation by CCL3 leading to the sequential release of TNF-alpha and leukotriene B4 (By similarity). Also mediates monocyte migration upon CXCL4 binding (PubMed:29930254). Activation by CCL5 results in neuroinflammation through the ERK1/2 signaling pathway (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Widely expressed in different hematopoietic cells.

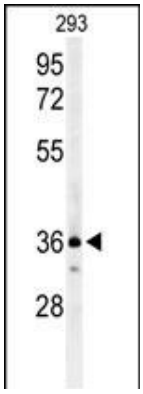
Background

CCR1 encodes a member of the beta chemokine receptor family, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. The ligands of this receptor include macrophage inflammatory protein 1 alpha (MIP-1 alpha), regulated on activation normal T expressed and secreted protein (RANTES), monocyte chemoattractant protein 3 (MCP-3), and myeloid progenitor inhibitory factor-1 (MPIF-1). Chemokines and their receptors mediated signal transduction are critical for the recruitment of effector immune cells to the site of inflammation. Knockout studies of the mouse homolog suggested the roles of this gene in host protection from inflammatory response, and susceptibility to virus and parasite. This gene and other chemokine receptor genes, including CCR2, CCRL2, CCR3, CCR5 and CCXCR1, are found to form a gene cluster on chromosome 3p.

References

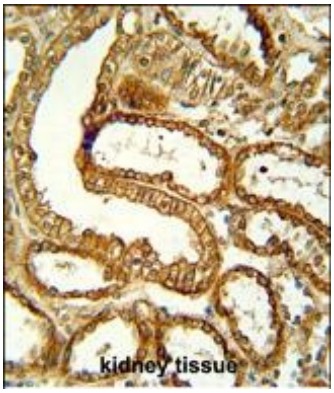
Dubois, P.C., et al. Nat. Genet. 42(4):295-302(2010)
Anderson, M.W., et al. Am. J. Clin. Pathol. 133(3):473-483(2010)
Amundsen, S.S., et al. Genes Immun. 11(1):79-86(2010)

Images

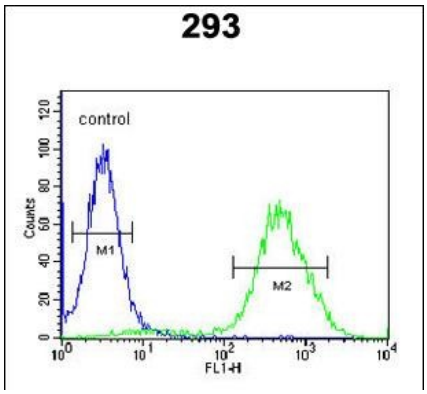


Western blot analysis of CCR1 Antibody (N-term) (Cat. #AP4859a) in 293 cell line lysates (35ug/lane). CCR1 (arrow) was detected using the purified Pab.

CCR1 Antibody (N-term) (Cat. #AP4859a) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CCR1 Antibody (N-term) for immunohistochemistry. Clinical



relevance has not been evaluated.



CCR1 Antibody (N-term) (Cat. #AP4859a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.