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CCL2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6699B

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P13500
Other Accession	P61274
Reactivity	Human
Predicted	Monkey, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	11025
Antigen Region	62-89

Additional Information

Gene ID	6347
Other Names	C-C motif chemokine 2, HC11, Monocyte chemoattractant protein 1, Monocyte chemotactic and activating factor, MCAF, Monocyte chemotactic protein 1, MCP-1, Monocyte secretory protein JE, Small-inducible cytokine A2, CCL2, MCP1, SCYA2
Target/Specificity	This CCL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 62-89 amino acids from the C-terminal region of human CCL2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	CCL2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCL2

Synonyms	MCP1, SCYA2
Function	Acts as a ligand for C-C chemokine receptor CCR2 (PubMed: 10529171, PubMed:10587439, PubMed:9837883). Signals through binding and activation of CCR2 and induces a strong chemotactic response and mobilization of intracellular calcium ions (PubMed:10587439, PubMed:9837883). Exhibits a chemotactic activity for monocytes and basophils but not neutrophils or eosinophils (PubMed:8195247, PubMed:8627182, PubMed:9792674). May be involved in the recruitment of monocytes into the arterial wall during the disease process of atherosclerosis (PubMed:8107690).
Cellular Location	Secreted
Tissue Location	Expressed in the seminal plasma, endometrial fluid and follicular fluid (at protein level) (PubMed:23765988). Expressed in monocytes (PubMed:2513477).

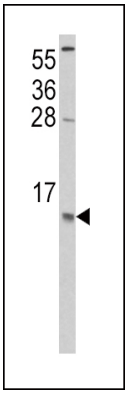
Background

Cytokines are a family of secreted proteins involved in immunoregulatory and inflammatory processes. CCL2 is structurally related to the CXC subfamily of cytokines. Members of this subfamily are characterized by two cysteines separated by a single amino acid. This cytokine displays chemotactic activity for monocytes and basophils but not for neutrophils or eosinophils. It has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis and atherosclerosis. It binds to chemokine receptors CCR2 and CCR4.

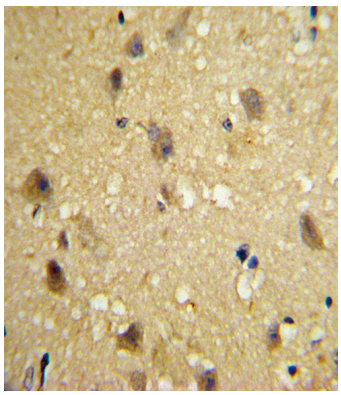
References

Saenz Lopez,P., Actas Urol Esp 33 (5), 474-481 (2009) Rollins,B.J., Genomics 10 (2), 489-492 (1991)

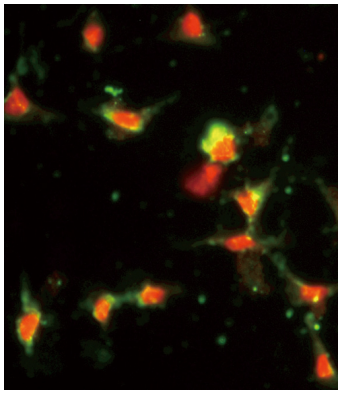
Images



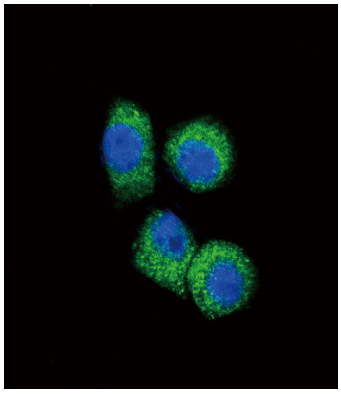
Western blot analysis of CCL2 Antibody (C-term) (Cat. #AP6699b) in Hela cell line lysates (35ug/lane). CCL2 (arrow) was detected using the purified Pab.



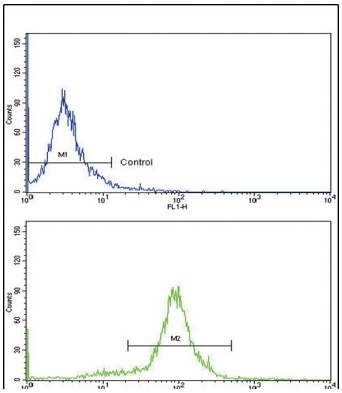
Formalin-fixed and paraffin-embedded human brain tissue with CCL2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Immunofluorescence analysis of CCL2 Antibody (C-term) with hela cells . 0.025 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit lgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.



Confocal immunofluorescent analysis of CCL2 Antibody (C-term) (Cat. #AP6699b) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



Flow cytometric analysis of hela cells using CCL2 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- A molecular profile of cocaine abuse includes the differential expression of genes that regulate transcription, chromatin, and dopamine cell phenotype.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.