10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CCL2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1701a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P13500
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	2D8
Isotype	IgG1
Calculated MW	11025
Description	This gene is one of several cytokine genes clustered on the q-arm of chromosome 17. Cytokines are a family of secreted proteins involved in immunoregulatory and inflammatory processes. The protein encoded by this gene 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.
Immunogen	Purified recombinant fragment of human CCL2 expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

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
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CCL2 Antibody 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).

References

J Cereb Blood Flow Metab. 2010 Mar;30(3):459-73. Prostate. 2010 Mar 1;70(4):433-42.

Images

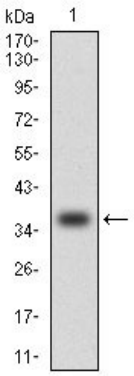


Figure 1: Western blot analysis using CCL2 mAb against human CCL2 (AA: 1-99) recombinant protein. (Expected MW is 36.5 kDa)

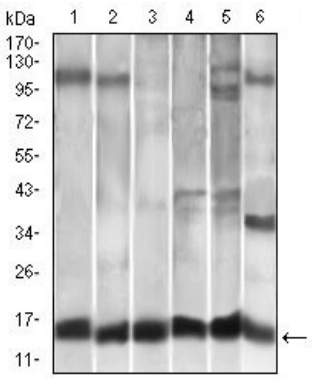
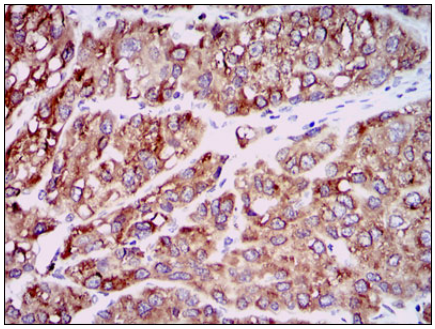


Figure 2: Western blot analysis using CCL2 mouse mAb against A549 (1), HeLa (2), Raw264.7 (3), L1210 (4), C6 (5), and COS-7 (6)cell lysate.

Figure 3: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using CCL2 mouse mAb with DAB staining.



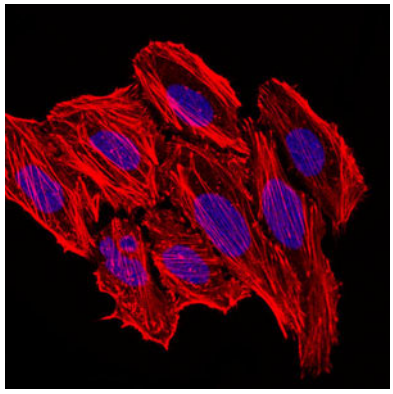


Figure 4: Immunofluorescence analysis of HepG2 cells. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

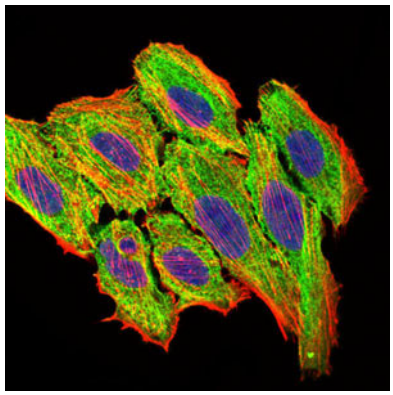


Figure 5: Immunofluorescence analysis of HepG2 cells using CCL2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

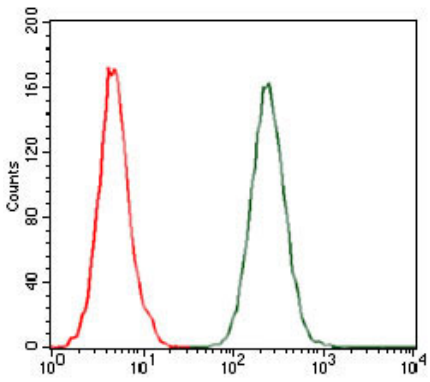


Figure 6: Flow cytometric analysis of A549 cells using CCL2 mouse mAb (green) and negative control (red).