

# CCL2 Antibody

Catalog # ASC11608

### Specification

## CCL2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes

WB, IHC-P, IF, E <u>P13500</u> <u>NP\_002973</u>, <u>4506841</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 11 kDa KDa CCL2 antibody can be used for detection of CCL2 by Western blot at 1 - 2 μg/mL.

### CCL2 Antibody - Additional Information

Gene ID Target/Specificity CCL2; 6347

**Reconstitution & Storage** CCL2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

CCL2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **CCL2 Antibody - Protein Information**

Name CCL2

Synonyms MCP1, SCYA2

#### Function

Acts as a ligand for C-C chemokine receptor CCR2 (PubMed:<a

href="http://www.uniprot.org/citations/10529171" target="\_blank">10529171</a>, PubMed:<a href="http://www.uniprot.org/citations/10587439" target="\_blank">10587439</a>, PubMed:<a href="http://www.uniprot.org/citations/9837883" target="\_blank">9837883</a>). Signals through binding and activation of CCR2 and induces a strong chemotactic response and mobilization of intracellular calcium ions (PubMed:<a href="http://www.uniprot.org/citations/10587439" target="\_blank">10587439</a>, PubMed:<a href="http://www.uniprot.org/citations/9837883" target="\_blank">9837883</a>). Exhibits a chemotactic activity for monocytes and basophils but not neutrophils or eosinophils (PubMed:<a href="http://www.uniprot.org/citations/8195247" target="\_blank">8195247</a>, PubMed:<a href="http://www.uniprot.org/citations/8627182" target="\_blank">8195247</a>, PubMed:<a href="http://www.uniprot.org/citations/8627182" target="\_blank">9792674</a>). May be involved in the recruitment of monocytes into the arterial wall during the disease process of atherosclerosis (PubMed:<a



href="http://www.uniprot.org/citations/8107690" target="\_blank">8107690</a>).

Cellular Location Secreted

**Tissue Location** 

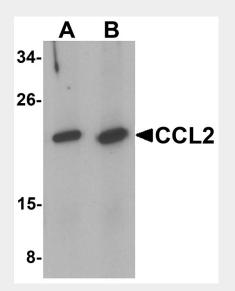
Expressed in the seminal plasma, endometrial fluid and follicular fluid (at protein level) (PubMed:23765988). Expressed in monocytes (PubMed:2513477).

#### **CCL2 Antibody - Protocols**

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

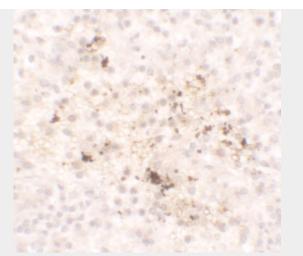
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **CCL2 Antibody - Images**

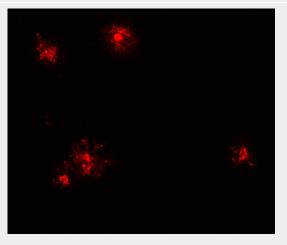


Western blot analysis of CCL2 in rat spleen tissue lysate with CCL2 antibody at 1 µg/mL.





Immunohistochemistry of CCL2 in spleen tissue with CCL2 antibody at 5  $\mu$ g/ml.



Immunofluorescence of CCL2 in human spleen tissue with CCL2 antibody at 20 µg/ml. **CCL2 Antibody - Background** 

CCL2 Antibody: CCL2, also known as monocyte chemotactic protein 1 (MCP1), belongs to the intercrine beta (chemokine CC) family. It is produced by a variety of cell types and is a potent chemoattractant for monocytes, memory T lymphocytes, and natural killer (NK) cells. It is upregulated during infection and inflammation. CCL2 is a potent basophil activator but does not affect eosinophils, whereas the related protein MCP2 stimulates both eosinophils and basophils. MCP3 has been shown to have the broadest range of influence. CCL2 has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis or atherosclerosis.

### **CCL2 Antibody - References**

Carr MW, Roth SJ, Luther E, et al. Monocyte chemoattractant protein 1 acts as a T-lymphocyte chemoattractant. Proc. Natl. Acad. Sci. USA 1994; 91:3652-6. Conductier G, Blondeau N, Guyon A, et al. The role of monocyte chemoattractant protein MCP1/CCL2 in neuroinflammatory diseases. J. Neuroimmunol. 2010; 224:93-100. Taub DD, Proost P, Murphy WJ, et al. Monocyte chemotactic protein-1 (MCP-1), -2, and -3 are chemotactic for human T lymphocytes. J. Clin. Invest. 1995; 95:1370-6 Bandinelli F, Del Rosso A, Gabrielli A, et al. CCL2, CCL3 and CCL5 chemokines in systemic sclerosis: the correlation with SSc clinical features and the effect of prostaglandin E1 treatment. Clin. Exp. Rheumatol. 2012; 30:S44-9.