

# Anti-MCP-1 Antibody

Catalog # ABO12256

### Specification

# Anti-MCP-1 Antibody - Product Information

ApplicationWBPrimary AccessionP13500HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for C-C motif chemokine 2(CCL2) detection. Tested with WB, ELISA in Human.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-MCP-1 Antibody - 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

Calculated MW 11025 MW KDa

**Application Details** ELISA , 0.1-0.5 μg/ml, Human, -<br>Western blot, 0.1-0.5 μg/ml, Human<br>

Subcellular Localization Secreted.

**Protein Name** C-C motif chemokine 2

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E. coli-derived human MCP-1 recombinant protein (Position: Q24-T99). Human MCP-1 shares 60.9% and 59.4% amino acid (aa) sequence identity with mouse and rat MCP-1, respectively.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the intercrine beta (chemokine CC) family.

#### Anti-MCP-1 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/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/9792674" target="\_blank">8627182</a>, PubMed:<a href="http://www.uniprot.org/citations/9792674" 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).

#### Anti-MCP-1 Antibody - 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
- <u>Cell Culture</u>

Anti-MCP-1 Antibody - Images



97KD —
58KD —
40KD -
29KD –
20KD -
14KD

Anti- MCP-1 Picoband antibody, ABO12256, Western blottingAll lanes: Anti MCP-1 (ABO12256) at 0.5ug/mlWB: SW620 Whole Cell Lysate at 40ugPredicted bind size: 11KDObserved bind size: 11KD

### Anti-MCP-1 Antibody - Background

Monocyte chemoattractant protein-1 (MCP-1), a member of the chemokine (chemotactic cytokine) family, is a potent monocyte agonist that is upregulated by oxidized lipids. MCP-1 is also known as CCL2, SCYA2, MCAF. MCAF is a member of family of factors involved in immune and inflammatory responses. The amino acid sequence deduced from the nucleotide sequence reveals the primary structure of the MCAF precursor to be composed of a putative signal peptide sequence of 23 amino acid residues and a mature MCAF sequence of 76 amino acid residues. MCP-1 plays a unique and crucial role in the initiation of atherosclerosis and may provide a new therapeutic target in this disorder. Human MCP-1 is a 8.7KDa non-glycoprotein, consisting of 99 amino acids in precursor form and 76 amino acids in mature form.