

# Anti-Human MCP-1 (RABBIT) Antibody

MCP-1 Antibody Catalog # ASR4927

# Specification

# Anti-Human MCP-1 (RABBIT) Antibody - Product Information

| Host<br>Conjugate<br>Target Species<br>Reactivity<br>Clonality<br>Application<br>Application Note | Rabbit<br>Unconjugated<br>Human<br>Human<br>Polyclonal<br>WB, E, I, LCI<br>This purified antibody has been tested in<br>western blotting and suitable in ELISA.<br>Specific conditions for reactivity should be<br>optimized by the end user. Expect a band<br>approximately 11,025 Da in size<br>corresponding to the mature human MCP-1<br>protein by western blotting in appropriate<br>cell lysate or extract. |
|---|--|
| Physical State<br>Buffer  | Lyophilized<br>0.02 M Potassium Phosphate, 0.15 M  |
| build   | Sodium Chloride, pH 7.2  |
| Immunogen   | This IgG fraction antibody was prepared<br>from rabbit antiserum after repeated<br>immunizations with mature length<br>recombinant human MCP-1 protein<br>produced in E.coli.  |
| Reconstitution Volume<br>Reconstitution Buffer  | 100 μL<br>Restore with deionized water (or<br>equivalent)  |

# Anti-Human MCP-1 (RABBIT) Antibody - Additional Information

Gene ID 6347

Other Names 6347

#### **Purity**

This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for human MCP-1 protein. A BLAST analysis was used to suggest cross-reactivity with MCP-1 from human sources based on 100% homology with the immunizing sequence. Based on 98 to 100% homology, there is a chance of cross-reactivity to MCP-1 from chimpanzee, orangutan, macaque, and baboon. Cross-reactivity with MCP-1 from other sources has not been determined.

### Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C



or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note** This product is for research use only and is not intended for therapeutic or diagnostic applications.

### Anti-Human MCP-1 (RABBIT) 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/10587439"
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">9792674</a>, PubMed:<a href="http://www.uniprot.org/citations/9792674"
target="\_blank">9792674</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-Human MCP-1 (RABBIT) 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>

Anti-Human MCP-1 (RABBIT) Antibody - Images





Anti-human MCP-1 by western blot shows detection of recombinant human MCP-1 raised in E.coli. Recombinant (0.1 µg, expect ~8.6 kDa) protein was loaded onto and resolved by SDS-PAGE, then transferred to nitrocellulose. The membrane was blocked with 1% BSA in TBST for 30 min at RT, followed by incubation with Rockland's, Inc. Anti-Human MCP-1. After washing, membrane was probed with secondary antibody Dylight<sup>™</sup> 649 Conjugated Anti-Rabbit IgG (H&L) (Goat) Antibody (p/n 611-143-122) diluted 1:20,000 in blocking buffer (p/n MB-070) for 30 min. at RT. Data was collected using Bio-Rad VersaDoc<sup>®</sup> 4000 MP imaging system.

### Anti-Human MCP-1 (RABBIT) Antibody - Background

MCP-1, or Monocyte chemoattractant protein 1, of the intercrine beta (chemokine CC) family, is a chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils. It augments monocyte anti-tumor activity and has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis or atherosclerosis. It may be involved in the recruitment of monocytes into the arterial wall during the disease process of atherosclerosis. MCP-1 exists as a monomer or homodimer; in equilibrium. It binds to CCR2 and CCR4 and is tethered on endothelial cells by glycosaminoglycan (GAG) side chains of proteoglycans. Processing at the N-terminus can regulate receptor and target cell selectivity. Deletion of the N-terminal residue converts it from an activator of basophil to an eosinophil chemoattractant.