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# **Recombinant Human CCL2/MCP-1 Protein**

Catalog No.: RP01411 Recombinant 1 Publications

# **Sequence Information**

Species Gene ID Swiss Prot <I>E. 6347 P13500 coli</I>

**Tags** No tag

**Synonyms** 

CCL2;GDCF-2;HC11;HSMCR30;MCAF;M CP-1;MCP1;SCYA2;SMC-CF

## **Product Information**

Source Purification
<I>E. coli</I> > 90% by SDSPAGE.

**Endotoxin** 

<1EU/µg

## **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### Contact

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# **Background**

Monocyte chemoattractant protein 1 (MCP-1), also called CCL2, belongs to a group of CC chemokines located in chromosome 17q11.2. MCP-1 protein interacts with chemokine C-C motif receptor 2 (CCR2) to activate and recruit monocytes, macrophages, CD4+ T cells and immature dendritic cells to the site of infection. The presence of MCP-1 protein in an adequate concentration is important for granuloma formation and M. tuberculosis clearance.

# **Basic Information**

#### Description

Recombinant Human CCL2/MCP-1 Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Gln24-Thr99) of human CCL2/MCP-1 (Accession #NP\_002973.1) fused with no additional amino acid.

# **Bio-Activity**

1.Measured by the ability to inhibit the proliferation of HUVEC(Human Umbilical Vein Endothelial Cells). The ED $_{50}$  for this effect is 0.53-2.12 ng/mL.|2.Measured by its ability to chemoattract THP-1 cells. The ED $_{50}$  for this effect is typically 1.01-4.04 ng/mL.

#### Storage

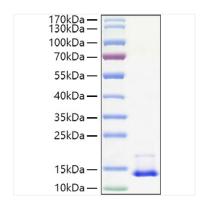
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

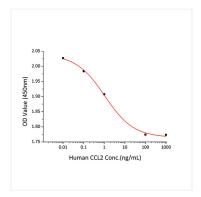
Avoid repeated freeze/thaw cycles.

<sup>\*</sup> For your safety and health, please wear a lab coat and disposable gloves when handling.

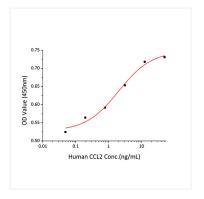
# **Validation Data**



Recombinant Human CCL2/MCP-1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human CCL2 inhibit the proliferation of HUVEC(Human Umbilical Vein Endothelial Cells).The ED<sub>50</sub> for this effect is 0.53-2.12 ng/mL.



Recombinant Human CCL2 chemoattract THP-1 cells. The  $ED_{50}$  for this effect is typically 1.01-4.04 ng/mL.