

# MCP-2/CCL8

Catalog # PVGS1425

## Specification

## MCP-2/CCL8 - Product Information

Primary Accession **Species** Human

P80075

Sequence Gln24-Pro99

Purity > 95% as analyzed by SDS-PAGE

**Endotoxin Level** < 0.2 EU/ μg of protein by gel clotting method

## **Biological Activity**

ED<sub>50</sub> < 0.5 µg/ml, measured by the FLIPR assay using CHO cells transfected with human CCR5, the receptor of human CCL8, corresponding to a specific activity of > 2.0 × 10<sup>3</sup> units/mg.

Expression System E. coli

Formulation

#### Reconstitution

Lyophilized after extensive dialysis against PBS.

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in  $ddH_2O$  up to 100 µg/ml.

#### Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

#### MCP-2/CCL8 - Additional Information

Gene ID 6355

**Other Names** 

C-C motif chemokine 8, HC14, Monocyte chemoattractant protein 2, Monocyte chemotactic protein 2, MCP-2, Small-inducible cytokine A8, MCP-2(6-76), CCL8, MCP2, SCYA10, SCYA8

#### **Target Background**

MCP-2 is a member of the chemokines, a group of 70-80 residue proteins sharing substantial sequence similarity. Within the chemokines, MCP-2 belongs to the CC subfamily, and is a member



of the Monocyte Chemoattractant Proteins (MCPs), which includes MCP-1, MCP-2, MCP-3, MCP-4, and MCP-5. MCP-2 shares 60% homology with MCP-1, and both proteins can undergo reversible dimerization. The main receptors of MCP-2 are G-protein coupled receptors CCR1 and CCR5. MCP-2 is a potential target in HIV-1 infected human glial cells as it may play a role in the modulation of viral spread in the brain. Recently, researchers found that mouse MCP-2 is expressed in the skin as a novel agonist of CCR8 and plays a role in eosinophilic inflammation.

## MCP-2/CCL8 - Protein Information

Name CCL8

Synonyms MCP2, SCYA10, SCYA8

#### Function

Chemotactic factor that attracts monocytes, lymphocytes, basophils and eosinophils. May play a role in neoplasia and inflammatory host responses. This protein can bind heparin. The processed form MCP-2(6-76) does not show monocyte chemotactic activity, but inhibits the chemotactic effect most predominantly of CCL7, and also of CCL2 and CCL5 and CCL8.

Cellular Location Secreted.

#### **Tissue Location**

Highest expression found in the small intestine and peripheral blood cells. Intermediate levels seen in the heart, placenta, lung, skeletal muscle, thymus, colon, ovary, spinal cord and pancreas. Low levels seen in the brain, liver, spleen and prostate

#### MCP-2/CCL8 - 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>

MCP-2/CCL8 - Images