

# Recombinant Human Monocyte Chemotactic Protein-1 (CCL2) (MCP-1)

## Certificate of Analysis and Data Sheet

➤ <b>Source:</b> E.Coli	➤ <b>Catalog No.</b> CHM-271
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### ➤ **Description :**

Recombinant Human MCP-1 also known as Monocyte Chemotactic and Activating Factor (MCAF) produced in E.Coli is a non-glycosylated, Polypeptide chain containing 76 amino acids and having a molecular mass of 8607 Dalton.

The rHuMCP-1 is purified by proprietary chromatographic techniques.

### ➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### ➤ **Formulation:**

Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

### ➤ **Solubility:**

It is recommended to reconstitute the lyophilized rHuMCP-1 in sterile 18MΩ-cm H<sub>2</sub>O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

### ➤ **Stability:**

Lyophilized rHuMCP-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rHuMCP-1 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please avoid freeze-thaw cycles.**

➤ **Purity:**

Greater than 99.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Anion-exchange FPLC.

(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Amino acid sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be Gln-Pro-Asp-Ala-Ile.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Biological Activity:**

This MCP-1 is fully biologically active when compared to standard. The specific activity as determined by the ability of MCP-1 to chemoattract human Monocytes using a concentration of 5-20 ng/ml.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of rHuMCP-1.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm .

2. Analysis by RP-HPLC, using a standard solution of MCP-1 as a Reference Standard.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.