

# Monocyte Chemotactic Protein-1 Human E. coli

# **Product Data Sheet**

Type: Recombinant	Cat. No.:	
Source: E. coli	RP1772710005	(5 µg)
Species: Human	RP1772710020	(20 ug)
Other names: MCP-1, CCL2, C-C motif chemokine 2, MCAF	RP1772711000	(1 mg)

#### Description

Monocyte Chemotactic Protein-1Human Recombinant 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 MCP-1 is purified by proprietary chromatographic techniques.

#### Introduction to the Molecule

Monocyte chemotactic protein-1 (MCP-1) is a member of the C-C family of chemokines. Chemokines are mediators that share the capacity to induce directional migration of leukocytes. MCP-1 is a chemoattractant for many cell types such as monocytes, neutrophils, hepatic stellate cells, granulocytes and T lymphocytes. MCP-1 is believed to play a role in a variety of pathological conditions, including inflammatory and immune reactions, atherosclerosis and neoplasia. Monocyte Chemotactic Protein-1 (MCP-1) is also known as Monocyte Chemotactic Activating Factor (MCAF) or CCL2.

# **Research topic**

Cytokines and chemokines and related molecules, Energy metabolism and body weight regulation

# Amino Acid Sequence

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

#### Source

E. coli

#### Purity

Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE

#### **Biological Activity**

The specific activity as determined by the ability of MCP-1 to chemoattract human Monocytes using a concentration of 5-20 ng/ml.

#### Formulation

The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing no additives.

#### Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

#### Storage, Stability/Shelf Life

Lyophilized MCP-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL2 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 prevent freeze-thaw cycles.** 

#### **Physical Appearance**

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