

# **Synonym**

CCL2,C-C motif chemokine 2,MCP-1,MCAF

#### **Source**

Human CCL2, Fc Tag(CC2-H5255) is expressed from human 293 cells (HEK293). It contains AA Gln 24 - Thr 99 (Accession # P13500-1). Predicted N-terminus: Gln 24

### **Molecular Characterization**

CCL2(Gln 24 - Thr 99) Fc(Pro 100 - Lys 330) P13500-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 35.1 kDa. The protein migrates as 40-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

# **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

## Storage

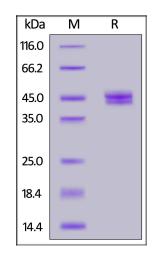
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

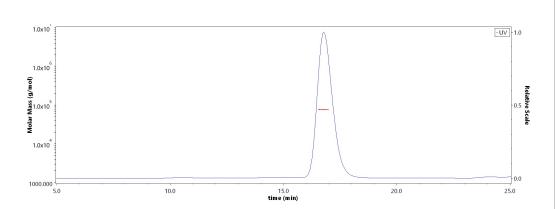
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human CCL2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## **SEC-MALS**



The purity of Human CCL2, Fc Tag (Cat. No. CC2-H5255) is more than 95% and the molecular weight of this protein is around 68-88 kDa verified by SEC-MALS.

Repor

# Background

Chemokines are a superfamily of secreted proteins involved in immunoregulatory and inflammatory processes. The superfamily is divided into four subfamilies based on the arrangement of N-terminal cysteine residues of the mature peptide. CCL2, a member of the CC subfamily, is characterized by two adjacent cysteine



# Human CCL2 / MCP-1 Protein, Fc Tag (MALS verified)





residues. CCL2 displays chemotactic activity for monocytes and basophils but not for neutrophils or eosinophils. It has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis and atherosclerosis. It binds to chemokine receptors CCR2 and CCR4. Elevated expression of the encoded protein is associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.

