



# Recombinant Protein Technical Manual

## Recombinant Mouse CCL3 Protein (His Tag)

RPES5168

### Product Data:

**Product SKU:** RPES5168

**Size:** 10µg

**Species:** Mouse

**Expression host:** E. coli

**Uniprot:** P10855

### Protein Information:

**Molecular Mass:** 10.8 kDa

**AP Molecular Mass:** 15 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM Tris,150mM NaCl,5%Trehalose,1mM EDTA,pH8.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** C-C motif chemokine 3;Heparin-binding chemotaxis protein; Macrophage inflammatory protein 1-alpha;MIP1-a; chemokine (C-C motif) ligand 3; LD78a; LD78 alpha; MIP alpha;Scya3

## Immunogen Information:

**Sequence:** Ala24-Ala92

## Background:

C-C Motif Chemokine 3 (MIP alpha,CCL3 ) is a member of the beta or CC subfamily of chemokines and is closely related to CCL4/MIP beta. CCL3 expression can be induced in a variety of hematopoietic cells, fibroblasts, smooth muscle cells, and epithelial cells. Mature mouse CCL3 shares 73%, 91%, and 82% amino acid sequence identity with human, rat, and cotton rat CCL3, respectively. CCL3 exerts its biological functions through interactions with CCR1, CCR3, and CCR5. It is cleared from the extracellular space by internalization via the decoy chemokine receptor D6. CCL3 promotes the chemoattraction, adhesion to activated vascular endothelium, and cellular activation of many hematopoietic cell types including activated T cells, NK cells, neutrophils, monocytes, immature dendritic cells, and eosinophils. CCL3 is also known as stem cell inhibitor (SCI) and can inhibit the proliferation of hematopoietic progenitor cells. CCL3 bioactivity contributes to tumor metastasis and the inflammatory components of viral infection, rheumatoid arthritis, and hepatitis, although it also can suppress the replication of HIV.