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## **Recombinant Mouse CSF-1/M-CSF Protein**

Catalog No.: RP01216S Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot** HEK293 cells 12977 P07141-1

**Tags** 

No-Tag

**Synonyms** 

MCSF;M-CSF;CSF-1;Lanimostim;CSF1

## **Product Information**

Source Purification

≥ 90% as determined by SDS-PAGE.

## **Endotoxin**

 $< 0.01 \, \text{EU/} \mu \text{g}$  of the protein by LAL method

## **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

## Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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## **Background**

Macrophage colony-stimulating factor 1, also known as CSF-1, M-CSF, is a single-pass membrane protein which is disulfide-linked as a homodimer or heterodimer. Granulocyte / macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. M-CSF/CSF-1 is known to facilitate monocyte survival, monocyte-to-macrophage conversion, and macrophage proliferation. M-CSF/CSF-1 is a secreted cytokine which influences hemopoietic stem cells to differentiate into macrophages or other related cell types. It binds to the Colony stimulating factor 1 receptor. M-CSF/CSF-1 may also be involved in development of the placenta. The active form of M-CSF/CSF-1 is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. M-CSF/CSF-1 induces cells of the monocyte/macrophage lineage. It

## **Basic Information**

#### Description

Recombinant Mouse CSF-1/M-CSF Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Pro187) of Mouse CSF-1/M-CSF (Accession #NP\_031804.3.) fused with No-tag.

#### **Bio-Activity**

Measured in a cell proliferation assay using M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED<sub>50</sub> for this effect is 3.76-15.16 ng/mL, corresponding to a specific activity of  $6.6\times10^4\sim2.65\times10^5$  units/mg.

## **Shipping**

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

#### **Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

#### Storage

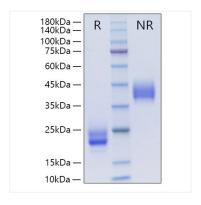
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at  $-20^{\circ}$ C for 3 months, at  $2-8^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

<sup>\*</sup> For your safety and health, please wear a lab coat and disposable gloves when handling.

## **Validation Data**



Recombinant Mouse CSF-1/M-CSF Protein was determined by SDS-PAGE under reducing (R) and nonreducing (NR) conditions.