Recombinant Mouse CSF-1/M-CSF Protein

Catalog No.: RP01216S Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Mouse	12977	P07141-1

Tags

No-Tag

Synonyms

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

Product Information

Source	Purification
HEK293 cells	

Calculated MWObserved MW21.44 kDa20-25 kDa

Endotoxin

< 0.01 EU/µg of the protein by LAL method.

Formulation

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

Reconstitution

Centrifµge 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

6	400-999-6126
\times	cn.market@abclonal.com.cn
€	www.abclonal.com.cn

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 monocytesmacrophages. M-CSF/CSF-1 is known to facilitate monocyte survival, monocyte-tomacrophage 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_{50} for this effect is 3.76-15.16 ng/mL, corresponding to a specific activity of $6.6 \times 10^4 \sim 2.65 \times 10^5$ units/mg.

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°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.





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



Recombinant Mouse CSF-1/M-CSF stimulates cell proliferation assay using M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED₅₀ for this effect is 5.84-23.36 ng/mL, corresponding to a specific activity of $4.28 \times 10^4 \sim 1.71 \times 10^5$ units/mg.



Osteoclast induced from primary mouse bone marrow cells.