

Animal-Free M-CSF Protein, Mouse (His)

Cat. No.:	HY-P700222AF
Synonyms:	rMuM-CSF; CSF-1; MGI-IM
Species:	Mouse
Source:	E. coli
Accession:	P07141 (K33-P187)
Gene ID:	12977
Molecular Weight:	Approximately 19.02 kDa

PROPERTIES

AA Sequence	<p>M K E V S E H C S H M I G N G H L K V L Q Q L I D S Q M E T S C Q I A F E F V D</p> <p>Q E Q L D D P V C Y L K K A F F L V Q D I I D E T M R F K D N T P N A N A T E R</p> <p>L Q E L S N N L N S C F T K D Y E E Q N K A C V R T F H E T P L Q L L E K I K N</p> <p>F F N E T K N L L E K D W N I F T K N C N N S F A K C S S R D V V T K P</p>
Biological Activity	Measure by its ability to induce proliferation in NFS-60 cells. The ED ₅₀ for this effect is <2 ng/mL. The specific activity of recombinant mouse M-CSF is approximately >5 x 10 ⁵ IU/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a solution containing 1X PBS, pH 8.0.
Endotoxin Level	<0.1 EU per 1 µg of the protein by the LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>M-CSF Protein is a key orchestrator in regulating the survival, proliferation, and differentiation of hematopoietic precursor cells, particularly mononuclear phagocytes, including macrophages and monocytes. It actively promotes the release of pro-inflammatory chemokines, thereby playing a pivotal role in innate immunity and inflammatory processes. Additionally, M-CSF assumes a crucial role in the regulation of osteoclast proliferation and differentiation, influencing bone resorption, and contributing to normal bone development. Beyond its skeletal impact, M-CSF is indispensable for normal male and female fertility. The cytokine also facilitates the reorganization of the actin cytoskeleton, regulates the formation of membrane</p>
------------	---

ruffles, cell adhesion, and cell migration. It further plays a role in lipoprotein clearance. M-CSF exists in multiple forms, including a homodimer with two identical 150-200 kDa proteoglycan subunits, a heterodimer with a 150-200 kDa proteoglycan subunit and a truncated 43 kDa subunit, and a homodimer with two identical 43 kDa subunits. The protein's diverse functions are mediated through its interaction with the receptor CSF1R.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA