

## M-CSF Protein, Human (223a.a, HEK293, His)

<b>Cat. No.:</b>	HY-P70488
<b>Synonyms:</b>	Macrophage Colony-Stimulating Factor 1; CSF-1; M-CSF; MCSF; Lanimostim; CSF1
<b>Species:</b>	Human
<b>Source:</b>	HEK293
<b>Accession:</b>	P09603 (E33-R255)
<b>Gene ID:</b>	1435
<b>Molecular Weight:</b>	Approximately 41.0 kDa

### PROPERTIES

<b>AA Sequence</b>	<pre> E E V S E Y C S H M   I G S G H L Q S L Q   R L I D S Q M E T S   C Q I T F E F V D Q E Q L K D P V C Y L   K K A F L L V Q D I   M E D T M R F R D N   T P N A I A I V Q L Q E L S L R L K S C   F T K D Y E E H D K   A C V R T F Y E T P   L Q L L E K V K N V F N E T K N L L D K   D W N I F S K N C N   N S F A E C S S Q D   V V T K P D C N C L Y P K A I P S S D P   A S V S P H Q P L A   P S M A P V A G L T   W E D S E G T E G S S L L P G E Q P L H   T V D P G S A K Q R   P P R           </pre>
<b>Biological Activity</b>	Measured in a cell proliferation assay using M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED <sub>50</sub> for this effect is 1.323 ng/mL, corresponding to a specific activity is 7.559×10 <sup>5</sup> units/mg.
<b>Appearance</b>	Lyophilized powder
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.2.
<b>Endotoxin Level</b>	<0.01 EU/μg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
<b>Storage &amp; Stability</b>	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.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	M-CSF Protein is a vital cytokine involved in regulating the survival, proliferation, and differentiation of hematopoietic precursor cells, particularly mononuclear phagocytes like macrophages and monocytes. It plays a crucial role in innate immunity and inflammatory processes by promoting the release of pro-inflammatory chemokines. Additionally, M-CSF
-------------------	--

---

Protein is essential for osteoclast proliferation and differentiation, regulating bone resorption, and normal bone development. It is also necessary for normal male and female fertility. Moreover, M-CSF Protein contributes to the reorganization of the actin cytoskeleton, facilitating membrane ruffle formation, cell adhesion, and cell migration. Furthermore, it plays a role in lipoprotein clearance. M-CSF Protein can exist in different forms, such as homodimer or heterodimer configurations, and it interacts with 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](mailto:tech@MedChemExpress.com)

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