

M-CSF Protein, Human (Tag free, HEK293)

Cat. No.:	HY-P701251
Synonyms:	Macrophage Colony-Stimulating Factor 1; CSF-1; M-CSF; Lanimostim
Species:	Human
Source:	HEK293
Accession:	P09603-1 (E33-N190)
Gene ID:	1435
Molecular Weight:	23-28 kDa, due to glycosylation

PROPERTIES

AA Sequence	<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 </pre>
Biological Activity	<p>1. Immobilized Human M-CSF at 0.5 µg/ml (100 µl/Well) on the plate. Dose response curve for Human M-CSF R, hFc Tag with the EC₅₀ 42.8 ng/ml determined by ELISA.</p> <p>2. Human M-CSF, No Tag immobilized on CM5 Chip can bind Human M-CSF R, hFc Tag with an affinity constant of 2.06 nM as determined in SPR assay (Biacore T200).</p>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	< 1 EU/µg of protein by gel clotting method
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
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	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

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