



**Recombinant Human Macrophage Colony Stimulating Factor  
(rhM-CSF)  
Catalog Number: 102-09**

<b>Description</b>	M-CSF is a four $\alpha$ helical bundle cytokine that is the primary regulator of macrophage survival, proliferation and differentiation. M-CSF is also essential for the survival and proliferation of osteoclast progenitors. M-CSF also primes and enhances macrophage killing of tumor cells and microorganisms, regulates the release of cytokines and other inflammatory modulators from macrophages, and stimulates pinocytosis.
<b>Synonyms</b>	CSF-1, Lanimostim
<b>AA Sequence</b>	EEVSEYCSHM IGSGLHLSLQ RLIDSQMETS CQITFEFVDQ EQLKDPVCYL KKAFLLVQDI MEDTMRFRDN TPNAIAIVQL QELSLRLKSC FTKDYEEHDKACVVRTFYETP LQLEKVKNV FNETKNLLDK DWNIFSKNCN NSFAECSSQ
<b>Source</b>	<i>Baculovirus</i> infected Silkworm
<b>Molecular Weight</b>	Approximately 42.0 kDa, a covalently linked homodimer, of two 21.0 kDa polypeptide monomers (1-149 amino acid of human M-CSF).
<b>Purity</b>	>95% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	Fully biologically active. The ED <sub>50</sub> is < 3ng/ml, as determined by murine M-NSF-60 proliferation.
<b>Physical Appearance</b>	White lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in 20mM PB, containing 1% HSA and 3% Mannitol.
<b>Endotoxin</b>	< 1EU/ $\mu$ g of growth factor as determined by LAL method.
<b>Reconstitution</b>	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
<b>Storage</b>	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
<b>Usage</b>	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.