

Recombinant Human Macrophage Colony Stimulating Factor

(rhM-CSF)

Catalog Number: 102-09

Description M-CSF is a four α 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.

Synonyms CSF-1, Lanimostim

AA Sequence EEVSEYCSHM IGSGHLQSLQ RLIDSQMETS CQITFEFVDQ EQLKDPVCYL

KKAFLLVQDI MEDTMRFRDN TPNAIAIVQL QELSLRLKSC FTKDYEEHDKACVRTFYETP LQLLEKVKNV FNETKNLLDK DWNIFSKNCN

NSFAECSSQ

Source Baculovirus infected Silkworm

Molecular Weight Approximately 42.0 kDa, a covalently linked homodimer, of two 21.0 kDa polypeptide

monomers (1-149 amino acid of human M-CSF).

Purity >95% by SDS-PAGE and HPLC analyses.

Biological Activity Fully biologically active. The ED₅₀ is < 3 ng/ml, as determined by murine M-NSF-60

proliferation.

Physical Appearance White lyophilized powder.

Formulation Lyophilized from a 0.2 µm filtered solution in 20 mM PB, containing 1% HSA and 3%

Mannitol.

Endotoxin $< 1EU/\mu g$ of growth factor as determined by LAL method.

Reconstitution Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0

mg/mL.

Storage Storage 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.

Usage This product is for research use only. It is not approved for use in humans, animals, or *in vitro*

diagnostic procedures.