



User Manual

Macrophage Colony Stimulating Factor (M-CSF) (Human)
Cat. No. HBOPP-13031

Description:

Macrophage Colony Stimulating Factor (M-CSF), also known as CSF-1, 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.

Source:

Baculovirus infected Silkworm

Unit:

2 μ g

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 0.1 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $< -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Formulation:

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

Storage:

This lyophilized preparation is stable at $2-8^{\circ}\text{C}$, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at $2-8^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.

Molecular Weight:

As a result of glycosylation, the recombinant protein migrates with an apparent molecular

mass of 42.0 ± 4.2 kDa in SDS-PAGE, a covalently linked homodimer, of two 21 kDa polypeptide monomers.

Endotoxin:

Less than 1 EU/ μ g of M-CSF as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The ED50 determined by a cell proliferation assay using murine M-NFS-60 cells is less than 1 ng/mL, corresponding to a specific activity of $> 1.0 \times 10^6$ IU/mg.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

EEVSEYCSHM IGSGHLQSLQ RLIDSQMETS CQITFEFVDQ EQLKDPVCYL
KKAFLLVQDI MEDTMRFRDN TPNAIAIVQL QELSLRLKSC FTKDYEEHDK
ACVRTFYETP LQLLEKVKNV FNETKNLLDK DWNIFSKNCN NSFAECSSQ

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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