



Recombinant Human M-CSF
(Macrophage Colony Stimulating Factor)

Catalog Number: 100-03
Accession Number: P09603

Specifications and Uses:

Alternate Names: MGI-IM, CSF-1

Description:

Macrophage Colony Stimulating Factor (M-CSF) is a hematopoietic growth factor produced by a wide variety of cells. M-CSF is known to stimulate differentiation of hematopoietic stem cells to monocyte-macrophage cell populations in culture. M-CSF acts through the CSF receptor 1. Although human M-CSF shows activity on mouse cells, mouse CSF shows no activity on human cells. Recombinant human M-CSF is a disulfide linked homodimer, containing two 159 amino acid chains, with a total molecular weight of 36.8 kDa.

Source: *E.coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant human M-CSF is lyophilized in 10 mM Na₂PO₄, 8.0 and 50 mM NaCl, at a concentration of 1 mg/mL. Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically ≥ 97%) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

Biological Activity:

The activity is determined by the dose-dependent proliferation of mouse NFS-60 cells and is typically less than 2.0 ng/mL.

AA Sequence:

MEEVSEYCSH MIGSGHLQSL QRLIDSQMET SCQITFEFVD QEQLKDPVCY LKKAFLVQD IMEDTMRFRD
NTPNAIAIVQ LQELSLRLKS CFTKDYEEHD KACVRTFYET PLQLEKVKVNFNETKNLLD KDWNIFSKNC
NNSFAECSSQ GHERQSEGS

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium