

Product: **Recombinant Human M-CSF**
Cat #: 300-161P
Powder

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. Alternate names: MGI-1M, CSF-1
MW	Disulfide linked homodimer, containing two 159 amino acid chains, with a total molecular weight of 36.8 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant human M-CSF is lyophilized in 10 mM Na ₂ PO ₄ , 8.0 and 50 mM NaCl, at a concentration of 1 mg/mL.
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.
Stability	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.
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.
Endotoxin Level	Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.
AA Sequence	MEEVSEYCSH MIGSGHLQSL QRLIDSQMET SCQITFEFVD QEQLKDPVCY LKKAFLLVQD IMEDTMRFRD NTPNAIAIVQ LQELSLRLKS CFTKDYEEHD KACVRTFYET PLQLLEKVKV VFNETHKLLD KDOWNIFSKNC NNSFAECSSQ GHERQSEGS

Purity greater than 97% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

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