

**Animal-Free Recombinant Human M-CSF**  
**Catalog # PBG10545****Specification**

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**Animal-Free Recombinant Human M-CSF - Product Information****Animal-Free Recombinant Human M-CSF - Additional Information****Description**

M-CSF is a potent hematopoietic factor produced by a variety of cells including lymphocytes, monocytes, fibroblasts, endothelial cells, myoblasts and osteoblasts. It is a key regulator of cellular proliferation, differentiation, and survival of blood monocytes, tissue macrophages and their progenitor cells. M-CSF has been shown to play important roles in modulating dermal thickness, and male and female fertility. M-CSF is clinically used in the treatment of infection, malignancies and atherosclerosis. It facilitates hematopoietic recovery after bone marrow transplantation. The human is reactive in murine systems, but the murine molecule exhibits no activity on human cells. Recombinant human M-CSF is a 36.8 kDa homodimeric protein containing two 159 amino acid polypeptide subunits.

**Biological Activity**

The  $ED_{50}$  was determined by the dose-dependent stimulation of the proliferation of murine M-NSF-60 cells  $\leq 1$  ng/ml, corresponding to a specific activity of  $\geq 1 \times 10^6$  units/mg.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1$ EU/  $\mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Animal-Free Recombinant Human M-CSF is for research use only and not for use in diagnostic or therapeutic procedures.

**Animal-Free Recombinant Human M-CSF - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Animal-Free Recombinant Human M-CSF - Images**