

**M-CSF**  
**Catalog # PVGS1170****Specification**

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**M-CSF - Product Information**

Primary Accession [P09603-3](#)  
**Species**  
Human

**Sequence**  
Glu33-Ser190

**Purity**  
> 95% as analyzed by SDS-PAGE  
> 95% as analyzed by HPLC

**Endotoxin Level**  
< 0.2 EU/ µg of protein by gel clotting method

**Biological Activity**  
ED<sub>50</sub> < 5.0 ng/ml, measured in a cell proliferation assay using Murine M-NFS-60 cells, corresponding to a specific activity of > 2.0 × 10<sup>5</sup> units/mg.

**Expression System**  
CHO

Formulation **Lyophilized after extensive dialysis against PBS.**

**Reconstitution**  
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH<sub>2</sub>O or PBS up to 100 µg/ml.

**Storage & Stability**  
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

**M-CSF - Additional Information**

**Target Background**  
Macrophage-Colony Stimulating Factor (M-CSF), also known as Colony Stimulating Factor-1 (CSF-1), is a hematopoietic growth factor. It can stimulate the survival, proliferation and differentiation of mononuclear phagocytes, in addition to the spreading and motility of macrophages. In mammals, it exists three isoforms, which invariably share an N-terminal 32-aa signal peptide, a 149-residue growth factor domain, a 21-residue transmembrane region and a 37-aa cytoplasmic tail. M-CSF is mainly produced by monocytes, macrophages, fibroblasts, and endothelial cells. M-CSF interaction with its receptor, c-fms, has been implicated in the growth, invasion, and metastasis of several diseases, including breast and endometrial cancers. The biological activity of human M-CSF is maintained within the 149-aa growth factor domain, and it is

only active in the disulfide-linked dimeric form, which is bonded at Cys63.

## **M-CSF - Protein Information**

## **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](#)

## **M-CSF - Images**