

## M-CSF

Catalog # PVGS1142

## **Product Information**

Primary Accession P09603-3
Species Human

**Sequence** Glu33-Ser190, expressed with an N-terminal Met

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

Endotoxin Level

**Biological Activity** ED<sub>50</sub> of 1.0-3.0 ng/ml, measured by cell proliferation assay of M-NFS-60,

corresponding to a specific activity of  $3.3 \times 10^5$ - $1.0 \times 10^6$  units/mg.

**Expression System** E. coli

**Formulation** Lyophilized after extensive dialysis against 50 mM Tris-HCl, pH 8.0. **Reconstitution** It is recommended that this vial be briefly centrifuged prior to open

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 or Tris-HCl, pH 8.0 up to 100 [g/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.

## **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 exits 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 cytoplasmictail. 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 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.

## **Protein Information**

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.