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## **GM-CSF**

Catalog # PVGS1000

## **Product Information**

Primary Accession P04141
Species Human

**Sequence** Ala18-Glu144, expressed with an N-terminal Met

Purity > 98% as analyzed by SDS-PAGE

> 98% as analyzed by SEC-HPLC

**Endotoxin Level** 

**Biological Activity** The ED<sub>50</sub> as determined by the dose-dependant stimulation of the

proliferation of human TF-1 cells (human erythroleukemic indicator cell line) is less than 0.1 ng/ml, corresponding to a specific activity of  $1.0 \times 10^7$  IU/mg.

**Expression System** E. coli

**Formulation** Lyophilized after extensive dialysis against 20 mM phosphate buffer, pH7.0,

150 mM NaCl, 5% mannitol buffer.

**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

sterile 18 M $\Omega$ -cm H<sub>2</sub>O up to 100  $\Box$ 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**

**Gene ID** 1437

Other Names Granulocyte-macrophage colony-stimulating factor, GM-CSF,

Colony-stimulating factor, CSF, Molgramostin, Sargramostim, CSF2, GMCSF

Target Background Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) was initially

characterized as a growth factor that can support the in vitro colony

formation of granulocyte-macrophage progenitors. Granulocyte

Macrophage-Colony Stimulating Factor (GM-CSF) is produced by a number of different cell types, including activated T cells, B cells, macrophages, mast cells, endothelial cells, and fibroblasts, in response to cytokine of immune and

inflammatory stimuli. Besides granulocyte-macrophage progenitors, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) is a growth factor for erythroid, megakaryocyte, and eosinophil progenitors. On mature

hematopoietic, monocytes/macrophages and eosinophils. Human

Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) can induce human endothelial cells to migrate and proliferate. Additionally, Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF) can stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma, and adenocarcinoma cell lines.

## **Protein Information**

Name CSF2

Synonyms GMCSF

**Function** Cytokine that stimulates the growth and differentiation of hematopoietic

precursor cells from various lineages, including granulocytes, macrophages,

eosinophils and erythrocytes.

Cellular Location Secreted

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