

### **GM-CSF**

Catalog # PVGS1015

# **Specification**

### **GM-CSF - Product Information**

Primary Accession
Species
Human

P04141

**Sequence** 

Ala18-Glu144

# **Purity**

> 95% as analyzed by SDS-PAGE<br/>br>> 95% as analyzed by RP-HPLC

### **Endotoxin Level**

< 1 EU/ µg of protein by LAL method

## **Biological Activity**

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 6-30 pg/mL.

# **Expression System**

P. pastoris

# **Theoretical Molecular Weight**

14.4 kDa

Formulation

Lyophilized from a 0.2  $\mu m$  filtered solution in 10 mM Tris-HCl, 4% Mannitol, 1% Sucrose, pH 8.5.

## 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 distilled water up to  $100 \mu g/ml$ .

# Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## **GM-CSF - 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.

# **GM-CSF - 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

## **GM-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 Cytomety
- Cell Culture

**GM-CSF - Images**