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GM-CSF
Catalog # PVGS1000

Specification

GM-CSF - 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
< 0.3 EU/ µg of protein by gel clotting method

Biological Activity
The ED₅₀ 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 × 10⁷ 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 MΩ-cm H_2O 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.

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