

# GM-CSF

Catalog # PVGS1000

## Product Information

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| <b>Primary Accession Species</b> | <a href="#">P04141</a><br>Human  |
| <b>Sequence</b>                  | Ala18-Glu144, expressed with an N-terminal Met   |
| <b>Purity</b>                    | > 98% as analyzed by SDS-PAGE<br>> 98% as analyzed by SEC-HPLC   |
| <b>Endotoxin Level</b>           |  |
| <b>Biological Activity</b>       | 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.   |
| <b>Expression System</b>         | E. coli  |
| <b>Formulation</b>               | Lyophilized after extensive dialysis against 20 mM phosphate buffer, pH7.0, 150 mM NaCl, 5% mannitol buffer.   |
| <b>Reconstitution</b>            | 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 <sub>2</sub> O up to 100 µg/ml.  |
| <b>Storage &amp; Stability</b>   | 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

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| <b>Other Names</b>       | Granulocyte-macrophage colony-stimulating factor, GM-CSF, Colony-stimulating factor, CSF, Molgramostin, Sargramostim, CSF2, GMCSF  |
| <b>Target Background</b> | 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**

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