



# Recombinant Human GM-CSF (E. coli)

<b>Catalog #</b>	EPT065
<b>Expression Host</b>	E.coli
<b>DESCRIPTION</b>	Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor is produced by our E.coli expression system and the target gene encoding Ala18-Glu144 is expressed.
<b>Accession</b>	P04141
<b>Synonyms</b>	Granulocyte-Macrophage Colony-Stimulating Factor; GM-CSF; Colony-Stimulating Factor; CSF; Molgramostin; Sargramostim; CSF2; GMCSF
<b>Mol Mass</b>	14.6 KDa
<b>AP Mol Mass</b>	13-17 KDa, reducing conditions
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Less than 0.001 ng/μg (0.01 EU/μg) as determined by LAL test.
<b>FORMULATION</b>	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.





## RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## STORAGE

Lyophilized protein should be stored at  $< -20^{\circ}\text{C}$ , though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at  $4-7^{\circ}\text{C}$  for 2-7 days.

Aliquots of reconstituted samples are stable at  $< -20^{\circ}\text{C}$  for 3 months.

## 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. It 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, GM-CSF is also a growth factor for erythroid, megakaryocyte and eosinophil progenitors. On mature hematopoietic, monocytes/ macrophages and eosinophils. GM-CSF has a functional role on non-hematopoietic cells. It can induce human endothelial cells to migrate and proliferate. Additionally, GM-CSF can also stimulate the proliferation of a number of tumor cell lines, including osteogenic sarcoma, carcinoma and adenocarcinoma cell lines.

### **SDS-PAGE**

