



Recombinant Human GM-CSF

Catalog #	EPT108
Expression Host	P.Pichia
DESCRIPTION	Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor is produced by our Yeast expression system and the target gene encoding Ala18-Glu144 is expressed.
Accession	P04141
Synonyms	Granulocyte-Macrophage Colony-Stimulating Factor; GM-CSF; Colony-Stimulating Factor; CSF; Molgramostin; Sargramostim; CSF2; GMCSF
Mol Mass	14.4 KDa
AP Mol Mass	24-35 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 10mM Tris-HCl, 4% Mannitol, 1% Sucrose, pH 8.5.





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 μ 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

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 also been reported to have 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

