

LeadGMP® Human GM-CSF Protein, His Tag, E. coli

Catalog Number LDG012PHE-GMP

Package 100 µg / 1 mg / Customized package

For full product information, images and publications, please visit [our website](#).



Specifications

Species of Origin

Human

Affinity Tag

His Tag (N-term)

Purity

>98% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce TF-1 cells proliferation. The ED₅₀ for this effect is <80 pg/mL. The specific activity of recombinant human GM-CSF is approximately >1 x 10⁷ IU/mg.

Mycoplasma

Not detected

Expression system

Escherichia coli

Buffer

Lyophilized from a 0.2 µm filtered solution of PBS, pH 8.0.

Molecular weight

The protein has a calculated MW of 15.4 kDa. The protein migrates as 15 kDa under reducing condition (SDS-PAGE analysis).

Endotoxin level

<0.05 EU per 1 µg of the protein by the LAL method.

Form

Lyophilized

Background

Tainan Headquarter

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Background

Granulocyte-macrophage colony-stimulating factor (GM-CSF) was first identified as a growth factor due to its ability to induce proliferation and differentiation of bone marrow progenitors into granulocytes and macrophages. GM-CSF is produced by multiple cell types including activated T cells, B cells, macrophages, endothelial cells and fibroblasts upon receiving immune stimuli. GM-CSF stimulates stem cells to produce granulocytes and monocytes functions as a cytokine.

Uniprot ID

P04141

Synonyms

Granulocyte-macrophage colony-stimulating factor, Colony-stimulating factor , CSF, Molgramostin, Sargramostim

Sequence Note

Ala18-Glu144

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 0.5 mg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

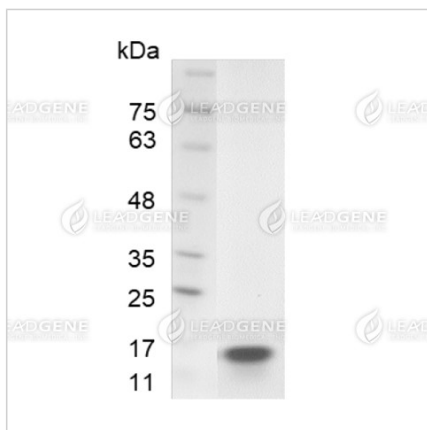
Avoid repeated freeze/thaw cycles.

Manufacturing specifications

LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- Animal-free reagent and laboratory
- Manufactured and tested under GMP guideline
- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- Stability monitor of product shelf-life

Image



SDS-PAGE analysis of LeadGMP®
GM-CSF, Human

Disclaimer : For Research Use or Further Manufacturing Only.

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