

LeadGMP® Human IL-3 Protein, His Tag, E. coli

Catalog Number LDG004PHE-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 (C-term)

Purity

>98% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce TF-1 cells proliferation. The ED $_{50}$ for this effect is <0.15 ng/mL. The specific activity of recombinant human IL-3 is approximately >1.2 x 10^6 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 16 kDa. The protein migrates as 13 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



Background

Interleukin-3 (IL-3) is a pleiotropic cytokine which can stimulates the survival, differentiation and proliferation of committed progenitor cells, including megakaryocyte, granulocytemacrophage, erythroid, eosinophil, basophil and mast cell lineages. IL-3 also enhances phagocytosis and antibody-mediated cellular cytotoxicity. IL-3 binds to IL-3R (IL-3 receptor), which is composed of a unique α subunit (IL- $3R\alpha$) and a common β -subunit (β c).

Uniprot ID

P08700

Synonyms

Interleukin-3, Hematopoietic growth factor, Mast cell growth factor, MCGF, Multipotential colonystimulating factor, P-cell-stimulating factor

Sequence Note

Ala20-Phe152

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® IL-3, Human



Disclaimer: For Research Use or Further Manufacturing Only.