

LeadGMP® Human IL-7 Protein, His Tag, E. coli

Catalog Number LDG007PHE-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

>97% as determined by SDS-PAGE analysis.

Activity

Measured by its ability to induce PHA-activated human PBMCs proliferation. The ED $_{50}$ for this effect is <0.8 ng/mL. The specific activity of recombinant human IL-7 is > 1 x 10 8 units/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 18.3 kDa. The protein migrates as 19 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-7 (IL-7) is a multipotent cytokine belonged to one of the members of IL-2 superfamily. IL-7 has diverse effects on the hematopoietic and immune regulations. IL-7 is a trophic factor that is necessary for both B cell and T cell proliferation and development. In addition, it presents potential antitumor effects in tumors such as glioma, melanoma, lymphoma, leukemia, prostate cancer, and glioblastoma.

Uniprot ID

P13232

Synonyms

Interleukin-7

Sequence Note

Asp26-His177

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.

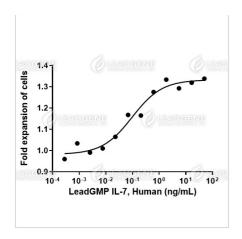
Avoid repeated freeze/thaw cycles.

Manufacturing specifications

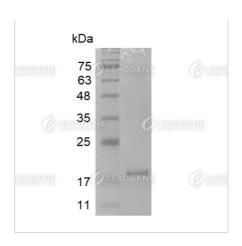
LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- 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



LeadGMP® Human IL-7 Protein, His Tag, E. coli (LDG007PHE-GMP) stimulates the proliferation of PHA-activated human peripheral blood lymphocytes (PBMC), with the ED50 < 0.8 ng/mL.



SDS-PAGE analysis of LeadGMP® IL-7, Human

Disclaimer: For Research Use or Further Manufacturing Only.