

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

LDG007PHE-GMP **Catalog Number Package** $100 \ \mu g \ / \ 1 \ mg \ / \ Customized package$

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 ED₅₀ for this effect is <0.8 ng/mL. The specific activity of recombinant human IL-7 is > 1 x 108 unit/mg, which is calibrated against the human IL-7 WHO Reference Reagent (NIBSC code: 90/530).

Mycoplasma

Not detected

Expression System

Escherichia coli

Storage 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 μ g of the protein by the LAL method.

Form

Lyophilized

Background

Tainan Headquarters

Innovation & Research Center

CLD Center



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.

Synonyms

Interleukin-7

Uniprot ID

P13232

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.

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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.

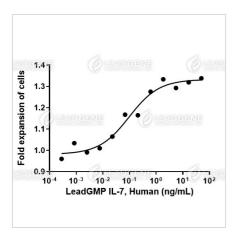
Avoid repeated freeze/thaw cycles.

Manufacturing Specifications

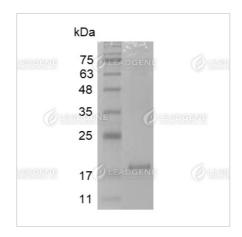
LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- 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



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