

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

<b>Catalog Number</b>	LDG007PHE-GMP
<b>Package</b>	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<sub>50</sub> for this effect is <0.8 ng/mL. The specific activity of recombinant human IL-7 is > 1 x 10<sup>8</sup> unit/mg, which is calibrated against the human IL-7 WHO Reference Reagent (NIBSC code: 90/530).

#### 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

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**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 H<sub>2</sub>O 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.

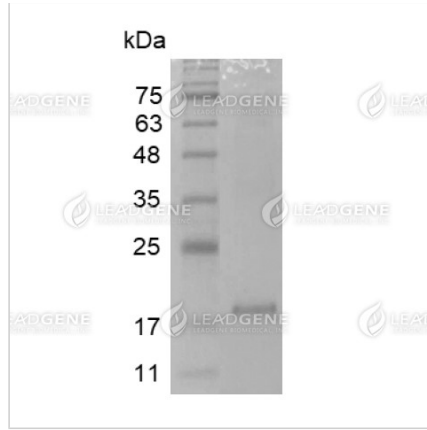
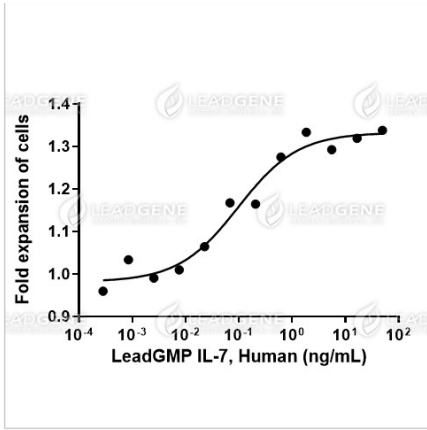
Avoid repeated freeze/thaw cycles.

### 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.