

LeadGMP® Human IFN Gamma Protein, His Tag, E. coli

Catalog Number LDG013PHE-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

Measure by its ability to induce cytotoxicity in HT29 cells. The ED₅₀ for this effect is <1 ng/mL. The specific activity of recombinant human IFN gamma is approximately >1 x 10^7 IU/mg, which is calibrated against the human IFN Gamma WHO Reference Material (NIBSC code: 87/586).

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 17.7 kDa. The protein migrates as 17 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

Taipei Office



Background

The cytokine IFN gamma could protect cells from viral infections and belongs to the family of interferons. A lot of studies have shown that IFN gamma secreted by antigen triggered cell types, including T cells, naive CD4+ T cells, macrophages, dendritic cells, and B cells. IFN gamma plays an important role to trigger the macrophage act against a diverse group of microbial targets, and the pleiotropic molecule associated with antiproliferative, pro-apoptotic and antitumor mechanisms. Based on the effector cytokine considered as a major effector of immunity, it has been used in the treatment of several diseases.

Uniprot ID P01579

Synonyms

Interferon gamma, Immune interferon

Sequence Note

Gln24-Gln166

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.

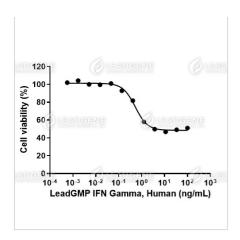
Avoid repeated freeze/thaw cycles.

Manufacturing specifications

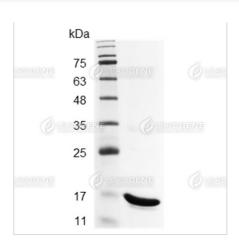
LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- 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 IFN Gamma Protein, His Tag, E. coli (LDG013PHE-GMP) induces cytotoxicity in HT29 cells, with the ED50 <1.0 ng/mL.



SDS-PAGE analysis of LeadGMP® IFN gamma, Human

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