

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 ED $_{50}$ 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

Innovation & Research Center

CLD Center



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.

Synonyms

Interferon gamma, Immune interferon

Uniprot ID

P01579

Sequence Note

Gln24-Gln166

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H_2O 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.

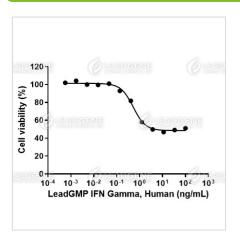
Avoid repeated freeze/thaw cycles.

Manufacturing specifications

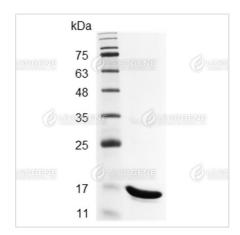
LeadGMP® recombinant proteins are manufactured in ISO 13485:2016 and GMP certified facility. The processes include:

- 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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