

LeadGMP® Human IL-4 Protein, His Tag, E. coli

Catalog Number LDG005PHE-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

>98% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce TF-1 cells proliferation. The ED₅₀ for this effect is < 0.2 ng/mL. The specific activity of recombinant human IL-4 is approximately > 1 x 10⁷ IU/mg, which is calibrated against the human IL-4 WHO International Standard (NIBSC code: 88/656).

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 15.9 kDa. The protein migrates as 12 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-4 (IL-4) is a key cytokine produced by activated T cells, mast cells, basophils, neutrophils and eosinophils. IL-4 is critical for the development of Th2-mediated responses, which is related to allergy and asthma. It can also regulate B cell responses, including survival, cell proliferation and gene expression. IL-4 also plays fundamental role for B-cell stimulation, including induction of the IgE isotype switch.

Uniprot ID

P05112

Synonyms

Interleukin-4, B-cell stimulatory factor 1 , BSF-1, Binetrakin, Lymphocyte stimulatory factor 1, Pitrakinra

Sequence Note

His25-Ser153

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.

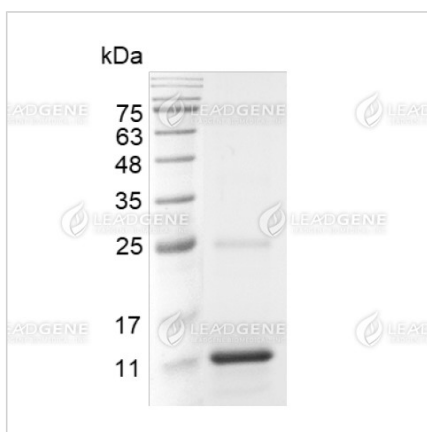
Avoid repeated freeze/thaw cycles.

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



SDS-PAGE analysis of LeadGMP® IL-4, Human

Disclaimer : For Research Use or Further Manufacturing Only.

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