

LeadGMP® Human FGF-2 (aa 135-288) Protein, His Tag, E. coli

Catalog Number LDG018PHE-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 (N-term)

Purity

>98% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce 3T3 cells proliferation. The ED $_{50}$ for this effect is <1 ng/mL. The specific activity of recombinant human FGF-2 is approximately >5 x 10^5 IU/mg.

Mycoplasma

Not detected

Expression System

Escherichia coli

Storage Buffer

Lyophilized from a 0.2 μm filtered solution of PBS containing 0.01% sarkosyl, pH 8.0.

Molecular weight

The protein has a calculated MW of 18.1 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



Background

Basic fibroblast growth factor (FGF-2, bFGF, FGFβ), a 18 kDa pleiotropic cytokine, plays multiple roles in different cells and tissues. FGF-2 can stimulate smooth muscle cell growth, wound healing, and tissue repair. In addition, FGF-2 has been shown to regulate the generation of neurons and astrocytes from progenitor cells. FGF-2 are also involved in a variety of biological processes, including embryonic development, morphogenesis, tissue repair, tumor growth, and invasion. As a multifunctional cytokine, FGF-2 is first isolated from the pituitary. Later, it was identified from various cell types including cardiac myocytes, cardiac fibroblasts, endothelial cells, and smooth muscle cells.

Uniprot ID

P09038

Synonyms

Fibroblast growth factor 2, Basic fibroblast growth factor, bFGF, Heparin-binding growth factor 2, HBGF-2

Sequence Note

Ala135-Ser288

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® FGF-2 (154 a.a.), Human

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