

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Fibroblast Growth Factor-21 (rHuFGF-21)

Catalog Number: PR1026

Source: Escherichia coli.

Quantity: 5µg/20µg/1.0mg

Description

Fibroblast growth factor 21 (FGF21) belongs to the large FGF family which has at least 23 members. All FGF family members are heparin binding growth factors with a core 120 amino acid (aa) FGF domain that allows for a common tertiary structure. FGFs are expressed during embryonic development and in restricted adult tissues. Four distinct but related classes of FGF receptors, FGF R1, 2, 3, and 4, exist. FGF-21, in the presence of betaKlotho as a protein cofactor, signals through the FGFR 1c and 4 receptors and stimulates insulin independent glucose uptake by adipocytes.

Molecular Weight:

Approximately 19.5 kDa, a single non-glycosylated polypeptide chain containing 182 amino acids.

Purity:

>95% by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED50 as determined by the dose-dependent stimulation of the proliferation of BaF3 cells expressing FGF receptors is 0.06-0.4µg/ml in the presence of betaKlotho and Heparin, corresponding to a Specific Activity of $\square 2.5 \times 10^3$ IU/mg.

Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2mm filtered concentrated solution in PBS, pH 7.4.

AA Sequence:

MHPIPDSSPLLQFGGQVRQRYLTYTDDA
QQTEAHLEIREDTVGGAAADQSPESLL

QLKALKPGVIQILGVKTSRFLCQRPDG
ALYGLSHFDPEACSFRELLLEDGYNVY
QSEAHGLPLHLPGNKSPHRDPAPRGP
RFLPLPGLPPALPEPPGILAPQPPDVGS
SDPLSMVGPSQGRSPSYAS

Endotoxin:

Less than 1EU/mg of rHuFGF-21 as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $< -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Storage:

This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

MADE IN CHINA

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