

# Recombinant Human FGF-21

(Fibroblast Growth Factor-21)

Catalog Number: 100-148
Accession Number: Q9NSA1

# Specifications and Uses:

Alternate Names: FGFL

#### **Description:**

Fibroblast Growth Factors (FGFs) are a 22 member family of proteins known to be involved in angiogenesis, wound healing and embryonic development. As a family, they bind to heparin and signal through four receptor tyrosine kinases called, FGFR1, 2, 3 and 4. FGF-21 is most closely related to FGF-19 and shows low binding to heparin and is highly diffusible. Recombinant human FGF-21 is a non-glycosylated protein, containing 182 amino acids, with a molecular weight of 19.5 kDa.

Source: E.coli

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation and Stability:

Recombinant human FGF-21 is lyophilized from 10 mM Na<sub>2</sub>PO<sub>4</sub>, pH 7.5 and 100 mM NaCl. Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

### **Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

#### Protein Content and Purity (typically $\geq 95\%$ ) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

#### **Endotoxin Level:**

Measured by kinetic LAL analysis and is typically  $\leq 1 \text{ EU/µg}$  protein.

## **Biological Activity:**

The activity is determined by the dose-dependent proliferation of NIH 3T3 cells in the presence of 5  $\mu$ g/mL FGF binding protein and is typically 0.12-0.6  $\mu$ g/mL.

## **AA Sequence:**

MHPIPDSSPL LQFGGQVRQR YLYTDDAQQT EAHLEIREDG TVGGAADQSP ESLLQLKALK PGVIQILGVK TSRFLCQRPD GALYGSLHFD PEACSFRELL LEDGYNVYQS EAHGLPLHLP GNKSPHRDPA PRGPARFLPL PGLPPALPEP PGILAPQPPD VGSSDPLSMV GPSQGRSPSY AS

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

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