

BACKGROUND

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 and having a molecular mass of 19.5 kDa.

Alternative Names:

FGFL

Amino Acid Sequence:

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

TECHNICAL INFORMATION**Source:** *E.coli***Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:Recombinant human FGF-21 is lyophilized from 10 mM Na₂PO₄, pH 7.5 + 100 mM NaCl.**Stability:**

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 determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

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

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

