

Recombinant Human Fibroblast Growth Factor 21

Cat. No. FGF21-103H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Recombinant Human Fibroblast Growth Factor-21 produced in *E. Coli* is a single, non-glycosylated, polypeptide chain containing 181 amino acids and an N-terminal Methionin (bold), having a molecular weight of 19.7 kDa (calculated). The amino acid sequence of the recombinant human FGF21 is 100% homologous to the amino acid sequence of the human FGF21 without signal sequence. The FGF-21 is purified by proprietary chromatographic techniques.

Species Human

Source E.coli

Description

FGF21 is a growth factor that is a member of the FGF family. Proteins of this family play a central role during prenatal development and postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-21 is preferentially expressed in liver, but an exact knowledge of FGF-21 bioactivity and its mode of action have been lacking to date. FGF-21 is a potent activator of glucose uptake on adipocytes, protects animals from diet-induced obesity when overexpressed in transgenic mice, and lowers blood glucose and triglyceride levels when therapeutically administered to diabetic rodents.

Amino Acid Sequence

MHPIPDSPLLQFGGQV RQRYLYTDDA QQTEAHLEIR EDGTVGGAAD
 QSPESLLQLK ALKPGVIQIL GVKTSRFLCQ RPDGALYGSL HFDPEACSF
 R ELLLEDGYNV YQSEAHGLPL HLPGNKSPHR DPAPRGPARF LPLPGLPPAP
 PEPPGILAPQ PPDVGSSDPL SMVGPSQGRS PSYAS.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Physical Appearance	Sterile Filtered white lyophilized powder.
Purity	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Formulation	Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 20 mM TRIS, 20 mM NaCl, pH 7.5.
Solubility	It is recommended to reconstitute the lyophilized Fibroblast Growth Factor-21 Human Recombinant sterile 18 MΩ-cm H ₂ O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.
Stability	Lyophilized FGF-21 Human Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Fibroblast Growth Factor 21 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	FGF21 fibroblast growth factor 21 [Homo sapiens]
Synonyms	FGF21; fibroblast growth factor 21; FGF-21
Gene ID	26291
mRNA Refseq	NM_019113
Protein Refseq	NP_061986
UniProt ID	Q9NSA1

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Chromosome Location	19q13.1-qter
MIM	609436
Pathway	MAPK signaling pathway; Melanoma; Pathways in cancer; Regulation of actin cytoskeleton
Function	growth factor activity; protein binding

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