

## Active Recombinant Human FGF21 Protein (182 aa)

Cat. No. FGF21-415F    Lot. No. (See product label)

### SPECIFICATION

**Product Overview**      Recombinant human Fibroblast Growth Factor-21 (rhFGF-21) produced in E. coli is a single non-glycosylated polypeptide chain containing 182 amino acids. A fully biologically active molecule, rhFGF-21 has a molecular mass of 19.5 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.

**Species**      Human

**Source**      E.coli

**ProteinLength**      182

**Description**      Fibroblast Growth Factor-21 (FGF-21) is a metabolic cytokine belonging to the heparin-binding FGF family. Along with FGF-19/15 and FGF-23, FGF-21 is categorized as a member of the atypical FGF subfamily, as it must be complexed to the Klotho co-receptor in order to bind to the FGF receptors and activate the downstream signaling pathway. In vivo FGF-21 is expressed in liver, pancreas, adipose tissue, and skeletal muscle, and it plays a central role in the energy metabolism. The expression of FGF-21 is stimulated by free fatty acids and insulin resistant states and is correlated with whole-body insulin resistance. FGF-21 activates glucose uptake in adipocytes and increases insulin sensitivity, implicating it as a novel target with potential anti-diabetic properties.

**Form**      Sterile Filtered White lyophilized (freeze-dried) powder.

**Bio-activity**      ED50 < 0.5

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

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

µg/mL, measured by a cell proliferation assay using NIH-3T3 cells in the presence of 1.25 µg/mL mouse Klotho and 10 µg/mL heparin, corresponding to a specific activity of > 2 × 10<sup>3</sup> units/mg.

**Molecular Mass** 19.5 kDa, observed by reducing SDS-PAGE.

**AA Sequence**  
 GHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESLLQL  
 KALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAH  
 GLPLHLPGNKSPHRDPAPRGPAPRFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMV  
 GPSQGRSPSYAS

**Endotoxin** < 0.2 EU/µg, determined by LAL method.

**Purity** > 95% as analyzed by SDS-PAGE and HPLC.

**Storage** Lyophilized recombinant human Fibroblast Growth Factor-21 (rhFGF-21) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rhFGF-21 remains stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade.

**Storage Buffer** Lyophilized after extensive dialysis against PBS.

**Reconstitution** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

## GENE INFORMATION

**Gene Name** [FGF21 fibroblast growth factor 21 \[ Homo sapiens \]](#)

**Official Symbol** [FGF21](#)

**Synonyms** FGF21; fibroblast growth factor 21; FGF-21;

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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



Gene ID	26291
mRNA Refseq	NM_019113
Protein Refseq	NP_061986
MIM	609436
UniProt ID	Q9NSA1

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

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

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