

Recombinant Human FGF21 protein

Cat. No. FGF21-562H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human FGF21 protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	181
Description	<p>Fibroblast growth factor-21 (FGF-21) belongs to the large FGF family which is encoded by the FGF-21 gene and it is specifically induced by HMGCS2 activity. All FGF family members are heparin binding growth factors with a core 120 amino acid (a.a.) FGF domain that allows for a common tertiary structure and they are involved in a variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-21 stimulates glucose uptake in differentiated adipocytes via the induction of glucose transporter SLC2A1/GLUT1 expression (but not SLC2A4/GLUT4 expression) and the activity depends on the presence of KLB. FGF-21 contains a 28 a.a. signal sequence and a 181 a.a. mature region but show limited binding to heparin. In addition, Mature human FGF-21 respectively shows 81 % a.a. identity to murine and rat FGF-21, and is known to be active on murine cells.</p>
Form	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5

 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

	<p>µg/ml, corresponding to a specific activity of $> 2.0 \times 10^3$ IU/mg in the presence of 5 g/ml of rMuKlotho-β and 10 µg/ml of heparin.</p>
Molecular Mass	<p>Approximately 19.4 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.</p>
AA Sequence	<p>HPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVGGAADQSPESELLQLK ALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDGYNVYQSEAHG LPLHLPGNKSPHRDPAPRGPAPRFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMVG PSQGRSPSYAS</p>
Endotoxin	<p>Less than 1 EU/g of rHuFGF-21 as determined by LAL method.</p>
Purity	<p>>96% by SDS-PAGE and HPLC analysis.</p>
Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.</p>
Reconstitution	<p>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 centigrade. Further dilutions should be made in appropriate buffered solutions.</p>

GENE INFORMATION

Gene Name FGF21

Official Symbol FGF21

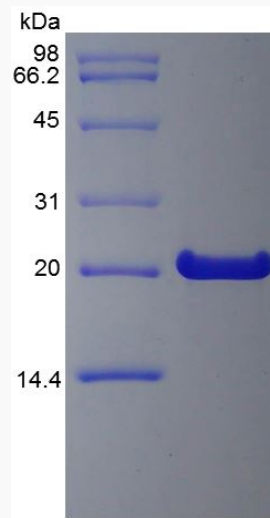
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Synonyms	FGF21; fibroblast growth factor 21; FGF-21;
Gene ID	26291
mRNA Refseq	NM_019113
Protein Refseq	NP_061986
MIM	609436
UniProt ID	Q9NSA1

SDS-PAGE of FGF21-562H



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