

Recombinant Rat Fgf21 protein

Cat. No. Fgf21-589R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Fgf21 protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	180
Description	Fibroblast growth factor 21 (FGF-21) encoded by the FGF-21 gene belongs to the large FGF family and it is specifically induced by HMGCS2 activity. In mice, brown adipose tissue becomes a source of systemic FGF-21 after cold exposure. 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. Recombinant rat FGF-21 contains 180 amino acids residues and show limited binding to heparin. In addition, rat FGF-21 respectively shows 81 % and 92 % a.a. identity to human and murine FGF-21, and it show activity on murine and human cells.
Form	Lyophilized from a 0.2µm filtered concentrated solution in PBS, 500 mM NaCl, 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 µg/ml, corresponding to a specific activity of $> 2.0 \times 10^3$ IU/mg in the presence of 5 g/ml of rMuKlotho-

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	β and 10 µg/ml of heparin.
Molecular Mass	Approximately 19.7 kDa, a single non-glycosylated polypeptide chain containing 180 amino acids.
AA Sequence	AYPISDSSPLLQFGGQVRQRYLYTDDDQDTEAHLEIREDGTVVGTahrspesllelk ALKPGVIQILGVKASRFLCQQPDGTLYGSPHFDPEACSFRELLLKDGYNVYQSEAHG LPLRLPQKDSQDPATRGpvrflpmpglphepqqpgvlppeppdvGSSDPLSMVE PLQGRSPSYAS
Endotoxin	Less than 1 EU/g of rRtFGF-21 as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	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.
Reconstitution	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.

GENE INFORMATION

Gene Name	Fgf21
Official Symbol	Fgf21

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Synonyms	FGF21; fibroblast growth factor 21;
Gene ID	170580
mRNA Refseq	NM_130752
Protein Refseq	NP_570108
UniProt ID	Q8VI80

SDS-PAGE of Fgf21-589R

