

FGF 21, mouse recombinant

CATALOG #:	4067-10	10 µg
	4067-50	50 µg
	4067-1000	1 mg
SYNONYMS:	Fibroblast growth factor 21, FGF-21	
SOURCE:	<i>E. coli</i>	
PURITY:	> 95 % by SDS-PAGE and RP-HPLC	
FORM:	Lyophilized from filtered (0.4 µm) solution containing 20 mM Tris, pH 7.4 and 20 mM NaCl	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile ddH₂O to a concentration ≥ 100 µg/ml. This solution can then be diluted into other aqueous buffers.

STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated at -20°C. Reconstituted mouse FGF 21 should be stored at 4°C for 2-7 days and at -20°C for future use. For long term storage it is recommended to add a carrier protein (0.1 % HSA or BSA). Avoid freeze/thaw cycles.

DESCRIPTION:

The FGFs are a family of more than 20 small (~17–26 kDa) secreted peptides. The initial characterization of these proteins focused on their ability to stimulate fibroblast proliferation. FGFs modulate cellular activity via at least 5 distinct subfamilies of high-affinity FGF receptors (FGFRs): FGFR-1, -2, -3, and -4, all with intrinsic tyrosine kinase activity and, except for FGFR-4, multiple splice isoforms, and FGFR-5, which lacks an intracellular kinase domain. There is growing evidence that FGFRs can be important for regulation of glucose and lipid homeostasis. FGFR-2 appears to be a key molecule during pancreatic development and FGFR-4 has been implicated in cholesterol metabolism and bile acid synthesis. 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. Fibroblast Growth Factor-21 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 183 amino acids including N-terminal Methionine and having a molecular mass of 20.1 kDa. The amino acid sequence of the recombinant mouse FGF21 is 100% homologous to the amino acid sequence of the mouse FGF21 without signal sequence. The FGF-21 is purified by proprietary chromatographic techniques.

AMINO ACID SEQUENCE:

MAYPIPDSSPLLQFGGQVRQRYLYTDDDDQTEAHLEIREDGTVVGAHRSPESLLELKALKPG
VIQILGVKASRFLCQQPDGALYGSPHFDEACSFRELLLEDGYNVYQSEAHGLPLRLPQKQDSP
NQDATSWGVPVRFPLMPGLLHEPQDQAGFLPPEPPDVGSSDPLSMVEPLQGRSPSYAS

FOR RESEARCH USE ONLY! Not to be used in humans.

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