

42184. Mouse Fibroblast Growth Factor-21 (mFGF21) with His-tag

Type:	Recombinant	Cat. No.:	42184
Tag:	His	Size:	0.1 mg
Source:	E.Coli	Purity:	>95%
Other names:	FGF21	Species:	Mouse

Description

Total: 207 AA. Mw: 23kDa (calculated). N-terminal His- tag and TEV cleavage site, 25 extra AA (highlighted).

Introduction

FGF-21, a polypeptide with 210 amino acid residues produced mostly from the liver tissue. Mouse FGF-21 shares 75% identity as human FGF-21. Recent animal studies indicate it possesses potent beneficial effects on glucose and lipid metabolism and insulin sensitivity. Increasing data shows FGF-21 can significantly stimulate glucose uptake in mature adipocytes. And the lowered LDL-cholesterol and increased HDL-cholesterol can also be observed. FGF-21 exerts its bioactivity through interaction with membrane bound FGF receptors (FGFRs) which requires β -Klotho as a co-factor to bind and activate FGFR signaling. The activation of FGF-21 can induce the stimulation of diverse downstream pathways mediated by MAPK,FRS-2, SHP-2, PI3K, raf, stat and other signaling molecules. In sum, FGF-21 induces a variety of significant beneficial metabolic changes without apparent adverse effects which makes this factor a hot candidate to treat some metabolic diseases.

Amino Acid Sequence

**MSYYHHHHHDYDIPTTENLYFQGAAYPIPDSSPLLQFGGQVRQRYLYTDDDQDTEAHLEIRE
DGTVVGAHRSPESLLELKALKPGVIQILGVKASRFLCQQPDGALYGSPHFDPEACSFRELLLED
GYNVYQSEAHGLPLRLPQKDSPNQDATSWGPVRFPLPMPGLLHEPQDQAGFLPPEPPDVGSSDPL
SMVEPLQGRSPSYAS**

Formulation: Lyophilized in 1 mg/mL in PBS.

Applications: ELISA and Western blotting.

Reconstitution: Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.

Storage: Store lyophilized protein at -20°C . Aliquot reconstituted protein and store at -80°C . Avoid repeated freezing /thawing cycles.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.

SDS-PAGE Gel


