

**41184. Human Fibroblast Growth Factor-21(hFGF21), His-tag**

Type:	Recombinant	Cat. No.:	41184
Tag:	His	Size:	0.1 mg
Source:	E.Coli	Purity:	>95%
Other names:	FGF21	Species:	Human

**Description**

Total 206AA Mw: 22.5kDa (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  $\beta$ -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**

**MSYYHHHHHHHDYDIPTTENLYFQGAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIRED**  
**GTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLEDG**  
**YNVYQSEAHGLPLHLPGNKSPHRDPAPRGPAPRFLPLPGLPPALPEPPGILAPQPPDVGSSDPLSMV**  
**GPSQGRSPSYAS**

**Formulation:** Lyophilized in 1 mg/mL in PBS.

**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  $-20^{\circ}\text{C}$ . Aliquot reconstituted protein and store at  $-80^{\circ}\text{C}$ . Avoid repeated freezing /thawing cycles.

**Applications:** ELISA and Western blotting.

**Quality Control Test**

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

**SDS-PAGE Gel**
