

FGF-21 Catalog # PVGS1153

## **Product Information**

Primary Accession Species	<u>Q9JJN1</u> Mouse
Sequence	Ala29-Ser210
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level Biological Activity	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 $\Box$ /ml, corresponding to a specific activity of > 2.0 × 10 <sup>3</sup> IU/mg in the presence of 5.0 $\Box$ /ml of rMuKlotho- $\beta$ and 10.0 $\Box$ /ml of heparin.
Expression System	E. coli
Theoretical Molecular Weight	19.9 kDa
Formulation Reconstitution	Lyophilized from a 0.2 Im filtered solution in 3 × PBS, pH 7.4. It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## **Additional Information**

Gene ID	56636
Other Names	Fibroblast growth factor 21, FGF-21, Fgf21
Target Background	Fibroblast growth factor-21 (FGF21) belongs to the large FGF family which has at least 23 members. 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. FGFs are expressed during embryonic development and in restricted adult tissues. Four distinct but related classes of FGF receptors, FGF R1, 2, 3, and 4, exist. FGF-21, in the presence of betaKlotho as a protein cofactor, signals through the FGFR 1c and 4 receptors and stimulates insulin independent glucose uptake by adipocytes.

## **Protein Information**

Name	Fgf21
Function	Stimulates glucose uptake in differentiated adipocytes via the induction of glucose transporter SLC2A1/GLUT1 expression (but not SLC2A4/GLUT4 expression). Activity probably requires the presence of KLB. Regulates systemic glucose homeostasis and insulin sensitivity.
Cellular Location	Secreted.
Tissue Location	Most abundantly expressed in the liver, also expressed in the thymus at lower levels (PubMed:10858549, PubMed:30389664). Expressed in skeletal muscle (at protein level) Secreted in plasma (at protein level) (PubMed:30605666)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.