

FGF-21

Catalog # PVGS1472

Specification

FGF-21 - Product Information

Primary Accession
Species
Mouse

Q9JJN1

Sequence

Ala29-Ser210

Purity

> 97% as analyzed by SDS-PAGE
br>> 97% as analyzed by HPLC

Endotoxin Level

< 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED₅₀ < 0.5 μ g/ml,measured by a cell proliferation assay using NIH-3T3 cells in the presence of 1.25 μ g/ml mouse Klotho and 10.0 μ g/ml heparin, corresponding to a specific activity of > 2.0 \times 10³ units/mg.

Expression System

E. coli

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 $\mu g/ml$.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

FGF-21 - 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. Along with FGF-19/15 and FGF-23, FGF-21 is categorized as a member of the atypical FGF subfamily, as it must be complexed to the Klotho co-receptor in order to bind to the FGF



receptors and activate the downstream signaling pathway. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes including

embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion.

FGF-21 - 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)

FGF-21 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FGF-21 - Images