

Mouse FGF21 / Fibroblast Growth Factor 21 Protein (His Tag)

Catalog Number: 50421-M08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

FGF-21

Protein Construction:

A DNA sequence encoding the mouse FGF21 (Q9JJN1) (Met 1-Ser 210) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ala 29

Molecular Mass:

The secreted recombinant mouse FGF21 consists of 193 amino acids and has a calculated molecular mass of 21.3 kDa. As a result of glycosylation, the apparent molecular mass of rm FGF21 is approximately 25 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

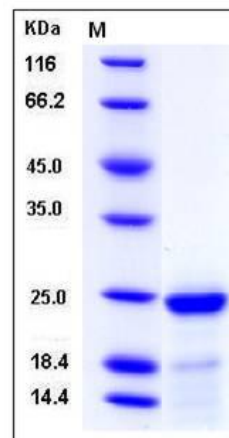
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

The fibroblast growth factors (FGFs) are a growing family of heparin-binding growth factors that regulate a variety of physiological processes in both developing and adult organism. FGFs function as key secreted signalling molecules in many developmental events. Mouse fibroblast growth factor 21 (FGF21) is a member of endocrine FGFs subfamily, along with FGF19 and FGF23. It is emerging as a novel regulator with beneficial effects on a variety of metabolic parameters, including glucose and lipid control. FGF21 functions as a metabolic regulator. The FGF21 transcript is abundantly expressed in liver. FGF21 activity depends on membrane protein betaKlotho that physically complexes with various FGF receptors, thus conferring them the ability to bind FGF21 and activate downstream signaling pathways. FGF21, like other FGFs, folds to a beta-trefoil-like core region, with disordered N- and C-termini. FGF21 recently has been proposed as a missing link in the biology of fasting, it shows significant, non-saturable, unidirectional influx across the blood-brain barrier (BBB). FGF21 is a critical metabolic regulator, pivotal for fasting adaptation and directly regulated by PPARalpha in rodents. FGF21 circulates in human plasma and increases by extreme fasting and PPARalpha activation. The wide interindividual variation and the induction of ketogenesis independent of FGF21 levels indicate that the physiological role of FGF21 in humans may differ from that in mice.

References

1. Hsueh, H. et al., 2007, Peptides. 28 (12): 2382-6.
2. Yamauchi, H. et al., 2006, EMBO Rep. 7 (6): 649-54.
3. Izumiya, Y. et al., 2008, FEBS Lett. 582 (27): 3805-10.
4. Arner, P. et al., 2008, FEBS Lett. 582 (12): 1725-30.
5. Micanovic, R. et al., 2009, J Cell Physiol. 219 (2): 227-34.

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