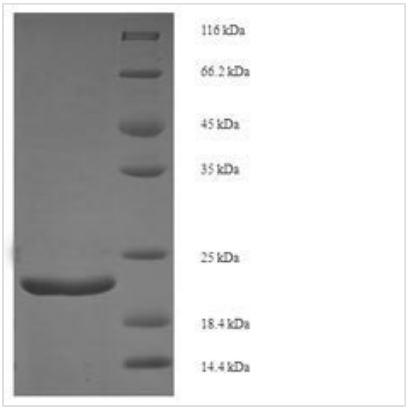
Recombinant Mouse Fibroblast growth factor 21 (Fgf21)

Product Code	CSB-EP008627MO
Relevance	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.
Abbreviation	Recombinant Mouse Fgf21 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9JJN1
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AYPIPDSSPLLQFGGQVRQRYLYTDDDQDTEAHLEIREDGTVVGAAHRSPESL LELKALKPGVIQILGVKASRFLCQQPDGALYGSPHFDPEACSFRELLLEDGYNV YQSEAHGLPLRLPQKDSPNQDATSWGPVRFLPMPGLLHEPQDQAGFLPPEP PDVGSSDPLSMVEPLQGRSPSYAS
Research Area	Others
Source	E.coli
Target Names	Fgf21
Protein Names	Recommended name: Fibroblast growth factor 21 Short name= FGF-21
Expression Region	29-210aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	23.9kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The preparation of Recombinant Mouse Fgf21 protein included 3 main steps: construct the expression vector, expression of protein of interest, and protein purification. Every step was performed under a strict QC system so that we got the premium protein. This Fgf21 was expressed in E.coli at and fused with N-terminal 6xHis tag. According to SDS-PAGE, the purity turns out to be 90%+.

FGF21 is a peptide hormone that is synthesized by several organs and regulates energy homeostasis. Excitement surrounding this relatively recently identified hormone is based on the documented metabolic beneficial effects of FGF21, which include weight loss and improved glycemia. The biology of FGF21 is intrinsically complicated owing to its diverse metabolic functions in multiple target organs and its ability to act as an autocrine, paracrine, and endocrine factor. In the liver, FGF21 plays an important role in the regulation of fatty acid oxidation both in the fasted state and in mice consuming a high-fat, low-carbohydrate ketogenic diet. FGF21 also regulates fatty acid metabolism in mice consuming a diet that promotes hepatic lipotoxicity. In white adipose tissue (WAT), FGF21 regulates aspects of glucose metabolism, and in susceptible WAT depots, it can cause browning. This peptide is highly expressed in the pancreas, where it appears to play an anti-inflammatory role in experimental pancreatitis. It also has an anti-inflammatory role in cardiac muscle. Although typically not expressed in skeletal muscle, FGF21 is induced in situations of muscle stress, particularly mitochondrial myopathies. FGF21 has been proposed as a novel therapeutic for metabolic complications such as diabetes and fatty liver disease.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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