

#### FGF-21, murine recombinant protein

FGF21, Fibroblast growth factor 21, FGFL Catalog # PBV10075r

## **Specification**

#### FGF-21, murine recombinant protein - Product info

Primary Accession O9IIN1

Calculated MW 20.1 kDa KDa

# FGF-21, murine recombinant protein - Additional Info

Gene ID 56636
Gene Symbol FGF-21

**Other Names** 

FGF21, Fibroblast growth factor 21, FGFL, UNQ3115/PRO10196

Gene Source Mouse Source E. coli

Assay&Purity SDS-PAGE; ≥95% Assay2&Purity2 HPLC; ≥95%

Recombinant Yes

Sequence MAYPIPDSSPLLQFGGQVRQRYLYTDDDQDTE

AHLEIREDGTVVGAAHRSPESLLELKALKPGVIQ ILGVKASRFLCQQPDGALYGSPHFDPEACSFRE LLLEDGYNVYQSEAHGLPLRLPQKDSPNQDAT SWGPVRFLPMPGLLHEPQDQAGFLPPEPPDVG

**SSDPLSMVEPLQGRSPSYAS** 

**Target/Specificity** 

FGF-21

#### **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile  $H_2O$  to a concentration  $\geq 100 \,\mu\text{g/ml}$ . This solution can then be diluted into other agueous buffers.

#### **Format**

Lyophilized protein

## **Storage**

-20°C; Lyophilized from filtered (0.4 mm) solution containing 20 mM Tris, pH 7.4 and 20 mM NaCl

# FGF-21, murine recombinant protein - 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, murine recombinant protein - Images

# FGF-21, murine recombinant protein - Background

The FGFs are a family of more than 20 small (~17-26 kDa) secreted peptides. The initial characterization of these proteins focused on their ability to stimulate fibroblast proliferation. FGFs modulate cellular activity via at least 5 distinct subfamilies of high-affinity FGF receptors (FGFRs): FGFR-1, -2, -3, and -4, all with intrinsic tyrosine kinase activity and, except for FGFR-4, multiple splice isoforms, and FGFR-5, which lacks an intracellular kinase domain. There is growing evidence that FGFRs can be important for regulation of glucose and lipid homeostasis. FGFR-2 appears to be a key molecule during pancreatic development and FGFR-4 has been implicated in cholesterol metabolism and bile acid synthesis. FGF-21 is preferentially expressed in liver, but an exact knowledge of FGF-21 bioactivity and its mode of action have been lacking to date. FGF-21 is a potent activator of glucose uptake on adipocytes, protects animals from diet-induced obesity when overexpressed in transgenic mice, and lowers blood glucose and triglyceride levels when therapeutically administered to diabetic rodents. Fibroblast Growth Factor-21 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 183 amino acids including N-terminal Methionine and having a molecular mass of 20.1 kDa. The amino acid sequence of the recombinant mouse FGF21 is 100% homologous to the amino acid sequence of the mouse FGF21 without signal sequence.

The FGF-21 is purified by proprietary chromatographic techniques.

#### FGF-21, murine recombinant protein - References

Nishimura T.,et al.Biochim. Biophys. Acta 1492:203-206(2000). Carninci P.,et al.Science 309:1559-1563(2005). Kharitonenkov A.,et al.J. Clin. Invest. 115:1627-1635(2005).