LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
San Diego, CA 92121
Tel: 858-876-8266
http://www.ldbiopharma.com

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human FGF21 Protein
Catalog Number: hRP-1235
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human FGF21 gene is a member of the fibroblast growth factor (FGF) family. 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. The function of human FGF21 has been demonstrated in regulation of metabolic pathways.

Full-length mature form of human FGF21 cDNA (29 – 209 aa, derived from BC018404) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is expressed in E.coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol:	FGF21
Accession Number:	NP_061986
Species:	Human
Size:	25 µg / Vial
Composition:	0.4 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Sucrose.
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Nishimura,T., et al., *Identification of a novel FGF, FGF-21, preferentially expressed in the liver*. Biochim. Biophys. Acta 1492 (1), 203-206 (2000)

Kharitonenkov,A., et al., *FGF-21 as a novel metabolic regulator*. J. Clin. Invest. 115 (6),

LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
San Diego, CA 92121
Tel: 858-876-8266
http://www.ldbiopharma.com

1627-1635 (2005)

Wan,Y. *Bone marrow mesenchymal stem cells: fat on and blast off by FGF21*. Int. J. Biochem. Cell Biol. 45 (3), 546-549 (2013)

Chu AY, et al., *Novel locus including FGF21 is associated with dietary macronutrient intake.* Hum. Mol. Genet. 22 (9), 1895-1902 (2013)

Ogawa,Y., et al., *BetaKlotho is required for metabolic activity of fibroblast growth factor 21*. Proc. Natl. Acad. Sci. U.S.A. 104 (18), 7432-7437 (2007)

Applications

1. May be used for in vitro FGF21 protein mediated adipogenesis regulation study with this protein as either coating matrix protein or as soluble factor.
2. May be used for FGF21 protein – protein interaction assay.
3. May be used for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIRED
GTVGGAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGALYGSLHFDPEACSFRELLLED
GYNVYQSEAHGLPLHLPGNKSPHRDPAPRGPARFLPLPGLPPALPEPPGILAPQPPDVGSSDPL
SMVGPSQGRSPSYAS