

Recombinant Bovine Fibroblast Growth Factor 21

Cat. No. FGF21-626B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Fibroblast Growth Factor -21 Bovine Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 182 amino acids, having a molecular weight of 19.5 kDa. The FGF-21 is purified by proprietary chromatographic techniques.
Species	Bovine
Source	Bovine
Description	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. This mitogenic activity was mediated through FGF receptors (FGFRs) 1, 2, or 3. A fourth closely related tyrosine kinase receptor (FGFR4) was able to bind the FGFs but did not lead to a mitogenic response. 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.
Form	The protein was lyophilized from a concentrated (0.8 mg/ml) solution with 0.4 mg/ml of NaHCO ₃ , pH 8.
Purity	Greater than 98.0% as determined by: (a) Analysis by Gel Filtration. (b) Analysis by

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	SDS-PAGE.
Physical Appearance	Sterile Filtered white lyophilized powder.
Solubility	It is recommended to reconstitute the lyophilized Bovine FGF-21 in sterile water or 0.4% NaHCO ₃ , not less than 100g/ml, which can then be further diluted to other aqueous solutions, preferably in presence of carrier protein.
Amino acid sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-His-Pro-Ile-Pro.
Protein content	Bovine FGF-21 quantitation was carried out by two independent methods ¹ . UV spectroscopy at 280 nm using the absorbency value of 0.47 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a standard solution of FGF-21 Recombinant as a Reference Standard.
Storage	Lyophilized FGF-21 Bovine Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Fibroblast Growth Factor 21 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	FGF21 fibroblast growth factor 21 [<i>Bos taurus</i>]
Official Symbol	FGF21
Synonyms	FGF21; fibroblast growth factor 21

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



Gene ID	785576
mRNA Refseq	XM_001789587
Protein Refseq	XP_001789639
Pathway	MAPK signaling pathway; Melanoma; Pathways in cancer; Regulation of actin cytoskeleton

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA