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FGF 2 Mouse

Fibroblast Growth Factor-Basic Mouse Recombinant
GRF0068

Product Overview

Name	FGF 2 Mouse
Description	
Fibroblast Growth Factor-Basic Mouse Recombinant	
Accession (Primary)	P15655
Synonyms	
HBGF-2, Prostatropin, FGF-2, FGB-b.	
Introduction	
FGF-basic is a member of the fibroblast growth factor (FGF) family. FGF family members bind and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from AUG and non-AUG (CUG) initiation codons resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF. The binding growth factors are angiogenic agents in vivo and are potent mitogens for a variety of cell types in vitro. there are differences in the tissue distribution and concentration of these 2 growth factors.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
FGF-b was lyophilized from 5mM Na 2 PO 4 , pH7.5 and 50mM NaCl.	
Stability	
Lyophilized Fibroblast Growth Factor-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF-basic 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.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	

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Amino acid sequence

MPALPEDGGA AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS.

Biological Activity

The activity as calculated by the dose-dependant proliferation of BALB/3T3 cells was found to be less than 1ng/ml corresponding to a specific activity of 1,000,000 units/mg.

Solubility

It is recommended to reconstitute the lyophilized Fibroblast Growth Factor b in sterile 18M-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

1. Title: Fibroblast Growth Factor-2 Autofeedback Regulation in Pituitary Folliculostellate TtT/GF Cells Publication: Endocrinology 150.7 (2009): 3252-3258. Link: FGF 2 Mouse prospec publication 2. Title: The Mouse Cornea as a Transplantation Site for Live Imaging of Engineered Tissue Constructs Publication: Cold Spring Harbor Protocols 2010.4 (2010): pdb-prot5416. Link: FGF-2 Mouse prospec publication

Protein content

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.885 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 calibrated solution of FGF2 as a Reference Standard.

Precautions

FGF 2 Mouse is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P15655)