



Fibroblast Growth Factor basic, mouse recombinant (rmFGF-basic)

Catalog No: 87377
Lot No: XXXXX
Source: *E. coli*
Synonyms: HBGH-2, HBGF-2, Prostatropin, FGF-2, FGB-b

Background

FGF-basic is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin 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 heparin-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.

Description

Fibroblast Growth Factor-basic (FGF-2) mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 146 amino acids and having a molecular mass of 16.3 kDa. FGF-2 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

FGF-b was lyophilized from 5 mM Na₂PO₄, pH 7.5 and 50 mM NaCl.

Solubility

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

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.

Amino Acid Sequence

MPALPEDGGA AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVSISIGVCA NRYLAMKEDG
RLASKCVTE ECGFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS

Activity

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

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51



Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.

CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51