



Fibroblast Growth Factor, basic, bovine (bFGF-basic)

Catalog No: 97055
Lot No: XXXXX
Source: Bovine Pituitary
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) bovine recombinant (purified from bovine pituitary) is a single, glycosylated, polypeptide chain having a molecular mass of 16 kDa. FGF-b is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The FGF-basic Bovine was lyophilized from a concentrated sterile solution containing 50 mM Na₂HPO₄, pH 7.5 and 0.5% HSA.

Solubility

It is recommended to reconstitute the lyophilized FGF-2 in sterile 18 MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized FGF2, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF-b Bovine should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Activity

The recommended concentration in responsive cells is 0.1 to 2 ng/ml.

Usage

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