

California Bioscience

83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone : +1.6268339877 Email : info@cali-bio.com

Product Datasheet

Product Name	Fibroblast Growth Factor Basic 147 a.a. Human Recombinant
Cata No	CB501291
Source	Escherichia Coli.
Synonyms	Prostatropin, HBGH-2, HBGF-2, FGF-2, FGF-b.

Description

FGF-basic 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. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis. Three alternatively spliced variants encoding different isoforms have been described. 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.

Fibroblast Growth Factor-2 Human Recombinant (FGF-2) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 147 amino acids and having a molecular mass of 16539 Dalton.

The FGF2 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried)

powder.

Biological Activity

The ED₅₀, measured in a mitogenic assay using quiescent NR6R-3T3 fibroblasts was found to be less then 0.1 ng/ml, corresponding to a specific activity of 3×10^6 Units/mg

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The bFGF was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM sodium phosphate buffer pH=8.

Reconstitution

It is recommended to reconstitute the lyophilized FGF-B in sterile $18M\Omega$ -cm H2O not less than 100μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized basic-FGF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGFb 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

* For Non-Clinical Research Use Only *



carrier protein (0.1% HSA or BSA). **Please prevent freeze-thaw cycles.**

Sequence

MPA LPEDGGSGAF PPGHFKDPKR LYCKNGGFFL RIHPDGRVDG VREKSDPHIK

Product Datasheet

LQLQAEERGV VSIKGVCANR YLAMKEDGRL LASKCVTDEC FFFERLESNN YNTYRSRKYT SWYVALKRTG QYKLGSKTGP GQKAILFLPM SAKS