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-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 ED<sub>50</sub>, 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 x  $10^6$  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 100 $\mu$ 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

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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