

# **Human Fibroblast Growth Factor-Basic (FGF-2, 147a.a.)**

# ORDERING INFORMATION

Catalog No: rAP-0022; Size: 10 µg; 50 µg Storage: <- 20° C

#### Synonyms:

Prostatropin, HBGH-2, HBGF-2, FGF-b.

#### Introduction:

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.

#### **Description:**

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.

#### Source:

Escherichia Coli.

### **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

## Formulation:

The bFGF was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM sodium phosphate buffer pH=7.5.

# Solubility:

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

# **Purity:**

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.



# Amino acid sequence:

MPA LPEDGGSGÅF PPGHFKDPKR LYCKNGGFFL RIHPDGRVDG VREKSDPHIK LQLQAEERGV VSIKGVCANR YLAMKEDGRL LASKCVTDEC FFFERLESNN YNTYRSRKYT SWYVALKRTG QYKLGSKTGP GQKAILFLPM SAKS

### **Biological Activity:**

The  $ED_{50}$ , 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.

#### Usage:

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