

# **Human Fibroblast Growth Factor-Acidic (FGF-1)**

# ORDERING INFORMATION

Catalog No: rAP-0017; Size: 10 µg; 50 µg Storage: <- 20° C

#### Synonyms:

HBGF-1, ECGF-beta, FIBP, FGFIBP, FIBP-1, ECGF, ECGFA, GLIO703, FGF1, FGF-a.

#### Introduction:

Acidic fibroblast growth factor 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-acidic Human Recombinant (FGF-1) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 140 amino acids and having a molecular mass of 15803 Dalton. The FGF acidic is purified by proprietary chromatographic techniques.

#### Source:

Escherichia Coli.

#### **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM Tris pH=7.6 and 100mM NaCl.

### Solubility:

It is recommended to reconstitute the lyophilized Fibroblast Growth Factor-acidic 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 Fibroblast Growth Factor-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF-a 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: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.



# Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Phe-Asn-Leu-Pro.

## **Biological Activity:**

The ED50, calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors (measured by <sup>3</sup>H-thymidine uptake) is <10 ng/ml, corresponding to a specific activity of 10<sup>5</sup> Units/mg.

## Usage:

Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.