11 Park Drive, Suite 12
Boston, MA 02215

Human Fibroblast Growth Factor-Basic (FGF-2)

ORDERING INFORMATION

Catalog No: rAP-0020;
Size: 10 µg; 50 µg
Storage: <- 20° C

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

Introduction:
Basic 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-2 Human Recombinant (FGF-2) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17353 Dalton.
The FGF-b 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 5mM Tris pH=7.5 and 150mM NaCl.

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

Stability:
Lyophilized Fibroblast Growth Factor-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF-b 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 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, angioproteomie@gmail.com

11 Park Drive, Suite 12
Boston, MA 02215

Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Glu-Gly-Glu-Ile

Biological Activity:

The ED50, calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors (measured by ^{3}H-thymidine uptake) is <0.5 ng/ml, corresponding to a specific activity of 2 x 10^{6} Units/mg.

Protein content:

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.8511 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).

2. Analysis by RP-HPLC, using a calibrated solution of Fibroblast Growth Factor-b as a Reference Standard.

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.