California Bioscience
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Product Datasheet

Product Name	Recombinant Human Fibroblast Growth Factor-Basic
Cata No	CB500011
Source	Escherichia Coli.
Synonyms	Prostatropin, HBGH-2, HBGF-2, FGF-2, FGF-b.

Description

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.

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

Purity

Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Specific 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.

Reconstitution

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.

Storage

Lyophilized Fibroblast Growth Factor-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution FGF-b should be stored at 4℃ between 2-7 days and for future use below -18℃.

Formulation

The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing 5mM Tris pH=7.5 and 150mM NaCl.