California Bioscience

83103 Avenue 48, Ste.1B #204
Coachella, CA 92236 USA

Product Datasheet

Product Name	Recombinant Human Fibroblast Growth Factor-Acidic
Cata No	CB500012
Source	Escherichia Coli.
Synonyms	HBGF-1, ECGF-beta, FIBP, FGFIBP, FIBP-1, ECGF, ECGFA, GLIO703, FGF1, FGF-a.

Description

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.

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.

Purity

Greater than 95.0% 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 <10 ng/ml, corresponding to a specific activity of 10^{5} Units/mg.

Storage

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

Formulation

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