

Fibroblast Growth Factor acidic, human recombinant (rHuFGF-acidic-Sf9)

Catalog No: 94956
Lot No: XXXXX
Source: Baculovirus

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

Background

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 (FGF-1) human recombinant produced in Sf9 insect cells is a single, glycosylated, polypeptide chain containing 140 amino acids and having a molecular mass of 15803 Dalton. FGF-a is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered liquid formulation.

Formulation

The sterile protein solution (1.8 mg/ml) contains 20 mM Tris HCl pH 7.9, 100 mM KCl, 0.2 mM DTT and 20% glycerol.

Stability

Fibroblast Growth Factor-acidic, although stable at 4°C for 3 weeks, should be stored desiccated 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

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

Activity

The ED50, calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors (measured by 3H-thymidine uptake) is <10 ng/ml, corresponding to a specific activity of 100,000 IU/mg.

Usage

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