



Catalog No: 08562

Lot No:

Source: Bovine Brain

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:

Bovine Fibroblast Growth Factor-acidic (FGF-1) purified from bovine brain contains a 17 kDa and a 20 kDa polypeptide chain. The 17 kDa peptide is derived from the 20K peptide by restricted proteolysis. (See Jaye et al²). The FGF acidic is purified by proprietary chromatographic techniques.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation:

Each 5µg aFGF were lyophilized from 0.5ml solution containing 1mM sodium phosphate, pH7 after filtration over a low binding membrane.

Solubility:

It is recommended to reconstitute the lyophilized aFGF in sterile 50mM Na₂HPO₄ pH-7, and 0.5% albumin. The recommended concentration in cell culture: 1-20ng/ml.

Stability:

Lyophilized aFGF although stable at room temperature for 2 weeks, should be stored desiccated below -18°C. Upon reconstitution aFGF should be stored at 4°C between 2-3 weeks and for future use below -18°C.

Please prevent freeze-thaw cycles.

Purity:

Greater than 90%.



Stimulates growth of bovine capillary endothelial cells by 3-5 fold over 5% calf serum at 10-25ng/ml FGF and 0ug/ml heparin.

Usage: This material is offered by BIOMOL for research, laboratory or further manufacturing purpose only. Not for human use.