

Fibroblast Growth Factor-acidic, His Tag, mouse recombinant (rmFGF-acidic-His)

Catalog No: 97449 Lot No: XXXXX Source: *E. coli*

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

FGF-1 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 161 amino acids (16-155) and having a molecular mass of 18 kDa (molecular weight on SDS-PAGE will appear higher). FGF-1 is fused to a 21 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless clear solution.

Formulation

The FGF-1 protein solution (1 mg/ml) containing 20 mM Tris-HCl buffer (pH 8.0), 1 mM DTT, 30% glycerol and 0.1 M NaCl.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino Acid Sequence

MGSSHHHHHH SSGLVPRGSH MFNLPLGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SAGEVYIKGT ETGQYLAMDT EGLLYGSQTP NEECLFLERL EENHYNTYTS KKHAEKNWFV GLKKNGSCKR GPRTHYGQKA ILFLPLPVSS D

Usage

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