

## 32-1158: FGF 1 Recombinant Protein

**Alternative Name :** HBGF-1, ECGF-beta, FIBP, FGFIBP, FIBP-1, ECGF, ECGFA, GLIO703, FGF1, FGF-a.

### Description

Source : Escherichia Coli. 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 approximately 15.8kDa. The FGF acidic is purified by proprietary chromatographic techniques. 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.

### Product Info

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| <b>Amount :</b>            | 50 µg  |
| <b>Purification :</b>      | Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.  |
| <b>Content :</b>           | The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing PBS, pH 7.4.  |
| <b>Storage condition :</b> | Lyophilized Fibroblast Growth Factor-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF-a should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles. |
| <b>Amino Acid :</b>        | MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SVGEVYIKST<br>ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAEKNWV FV GLKKNNGSCKR<br>GPRTHYGQKA ILFLPLPVSS D.  |

### Application Note

It is recommended to reconstitute the lyophilized Fibroblast Growth Factor-acidic in sterile 18M<sup>Ω</sup>-cm H<sub>2</sub>O at 4 degrees Celsius at a concentration of 0.1mg-0.25mg per 1ml. Allow sample to sit for 5 min. at 4 degrees, spin to remove precipitant. The ED<sub>50</sub>, calculated by the dose-dependant proliferation of mouse BALB/c 3T3 cells is <0.5 ng/ml, corresponding to a specific activity of > 2,000,000IU/mg.

