Recombinant Mouse Fibroblast Growth Factor-acidic (rm FGF-a / FGF-1)

Synonyms: HBGF-1, ECGF-beta, FIBP, FGFIBP, FIBP-1, ECGF, ECGFA, GLIO703.

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: rm Fibroblast Growth Factor-acidic produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 141 amino acids and having a molecular mass of 15.9 kDa.
The FGF acidic is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 µm filtered solution in 5mM NaP + 50mM NaCl, pH-7.5.
The sample size of 1µg contains Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rm FGF-a in sterile H_2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm FGF-a, although stable at room temperature for 3 weeks, should be stored desiccated below –18° C. Upon reconstitution rm FGF-a should be stored at 4° C between 2-7 days and for future use 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 SDS-PAGE.

Amino acid sequence: MFNLPLGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SAGEVYIKGT ETGQYLAMDT EGLLYGSQTP NEECLFLERL EENHYNTYTS KKHAEKNWFV GLKKNGSCKR GPRTHYGQKA ILFLPLPVSS D.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

Biological Activity: The ED_{50} as determined by the dose-dependent stimulation of thymidine uptake by 3T3 cells in the presence of heparin is ≤ 0.5 ng/ml corresponding to a specific activity of ≥ 2 x 10^6 units/mg.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

small	10 µg	Cat.N°	12343553
medium	50 µg	Cat.N°	12343555
large	250 µg	Cat.N°	12343557

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