

Recombinant Human Fibroblast Growth Factor-acidic (rh FGF-a / FGF-1)

Synonyms: HBGF-1, FIBP, FGFIBP, FIBP-1, ECGF, ECGFA

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: Recombinant human FGF-acidic (FGF-1) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 141 amino acids and having a molecular mass of 15967 Dalton. The rh FGF-acidic is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: lyophilized from 0.22µm filtered solution in 10mM sodium phosphate, 75mM NaCl, pH 7.5. The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh FGF-acidic in sterile H₂O at 4 degrees Celsius at a concentration of 0.1mg - 0.25mg per 1ml. Allow sample to sit for 5 minutes at 4 degrees, spin to remove precipitant.

Stability: Lyophilized rh FGF-acidic although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh FGF-acidic 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: MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTDRSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAEKNWFV GLKKNNGSCKR GPRTHYGQKA ILFLPLPVSS D

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

Biological Activity: Calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors the ED50 is < 1 ng/ml.

This material is offered for **research use 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.

<i>small</i>	10 µg	Cat.N°	11343553
<i>medium</i>	50 µg	Cat.N°	11343555
<i>large</i>	250 µg	Cat.N°	11343557
<i>x-large</i>	1000 µg	Cat.N°	11343558

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
 phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com