

## FGF1

### Recombinant Human Fibroblast Growth Factor acidic

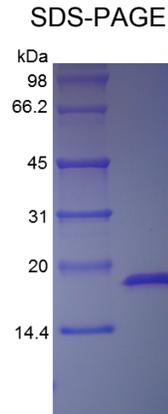
<b>Catalog No.</b>	CRF000A CRF000B CRF000C	<b>Quantity:</b>	10 µg 50 µg 1.0 mg
<b>Alternate Names:</b>	AFGF, ECGF, ECGF-beta, ECGFA, ECGFB, FGF-1, FGF-alpha, FGFA, HBGF-1, HBGF1		
<b>Description:</b>	<p>Recombinant Human FGF acidic is a single, non-glycosylated polypeptide chain containing 141 amino acids.</p> <p>Background: Fibroblast Growth Factor acidic (FGF acidic), also known as FGF-1 and endothelial cell growth factor, is a member of the fibroblast growth factor (FGF) family. Fibroblast growth factor was found in pituitary extracts in 1973 and then tested in a bioassay that caused fibroblasts to proliferate. After further fractionating the extract using acidic and basic pH, two different forms have isolated that named "acidic fibroblast growth factor: (FGF1) and "basic fibroblast growth factor" (FGF2). Human FGF-acidic shares 54% amino acid sequence identity with FGF-basic. In mammalian FGF receptor family has 4 members, FGFR1, FGFR1, FGFR3, and FGFR4, and 1, 2, 3 have 2 subtypes "b", "c". aFGF can bind and activate all 7 different FGFRs. Affinity between aFGF and its receptors can be increased by heparin or heparin sulfate proteoglycan. FGF-acidic plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. FGF-acidic is also involved in a variety of biological processes, including embryonic development, morphogenesis, tissue repair, tumor growth and invasion.</p>		
<b>GeneID:</b>	2246		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	~16 kDa		
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.		
<b>Purity:</b>	>95% by SDS-PAGE and HPLC analyses.		
<b>Endotoxin Level:</b>	<1 EU/µg as determined by LAL method.		
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> , as determined by a cell proliferation assay using murine balb/c 3T3 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg in the presence of 10 µg/ml of heparin.		
<b>Specific Activity:</b>	>2.0 × 10 <sup>6</sup> IU/mg		
<b>Amino Acid Sequence:</b>	MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAEKNWFV GLKKNNGSCKR GPRTHYGQKA ILFLPLPVSS D		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. This depends upon the particular application employed. Further dilutions should be made in appropriate		



buffered solutions.

**Storage & Stability:**

The lyophilized protein is stable at 2-8°C, but should be kept desiccated at -20°C for long term storage. Reconstituted protein is stable for 1 week at 2-8°C. For maximal stability, divide the reconstituted protein into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

