

# Recombinant Human Fibroblast Growth Factor- acidic (rHu aFGF )

Catalog No: #70401

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## Description

Product Name	Recombinant Human Fibroblast Growth Factor- acidic (rHu aFGF )
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Species Reactivity	Hu
Target Name	rHu aFGF
Other Names	FGF-1, ECGF, HBGF-1
Accession No.	accession:P05230 GeneID:2246
Uniprot	P05230
GeneID	2246;
Calculated MW	Approximately 16.0 kDa, a sing
SDS-PAGE MW	Sterile Filtered White lyophil
Target Sequence	MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTDRDSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAEKNWV FV GLKKNKNGSCKR GPRTHYGGKA ILFLPLPVSS D
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Storage	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze thaw cycles.

## Background

Human aFGF, encoded by the FGF1 gene, 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" (FGF-1) and "basic fibroblast growth factor" (FGF-2). Human aFGF shares 54 % amino acid sequence identity with bFGF. In mammalian FGF receptor family has 4 members, FGFR1, FGFR2, FGFR3, and FGFR4, and 1, 2, 3 have 2 sub-types  $\alpha$ 1/2 and  $\beta$ 1/2. aFGF can bind and activate all 7 different FGFRs. Affinity between aFGF and its receptors can be increased by heparin or heparan sulfate proteoglycan. aFGF plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. aFGF are also involved in a variety of biological processes, including embryonic development , morphogenesis, tissue repair, tumor growth and invasion.

## References

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Note: This product is for in vitro research use only