

**Recombinant Human Acidic Fibroblast Growth Factor
(rhaFGF)
Catalog Number: 104-01**

Description	Acidic Fibroblast Growth Factor (aFGF) is a member of the FGF family of mitogenic peptides which is comprised of at least 23 proteins showing 35-55% amino acid sequence conservation. Unlike other FGF family members, aFGF and basic FGF (bFGF) lack signal peptides and are secreted via a different mechanism other than the classical protein secretion pathway. aFGF has been detected in large amounts in the brain. Other cells known to express aFGF include hepatocytes, vascular smooth muscle cells, CNS neurons, skeletal muscle cells, fibroblasts, keratinocytes, endothelial cells, intestinal columnar epithelium cells, pituitary basophils and acidophils. As with other FGF's, aFGF exhibits considerable species crossreactivity. aFGF and bFGF stimulate the proliferation of all cells of mesodermal origin, and many cells of neuroectodermal, ectodermal and endodermal origin.
Synonyms	FGF-1, HBGF-1, ECGF-beta (endothelial cell growth factor beta), Fibroblast Growth Factor-acidic
AA Sequence	MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDTDGLLYGSQTPNEECLFLERL EENHYNTYIS KKHAEKNWFV GLKKNNGSCKR GPRTHYGQKA ILFLPLPVSS D
Source	<i>Escherichia coli</i>
Molecular Weight	Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 140 amino acids.
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active. The ED ₅₀ is < 10ng/ml, corresponding to a specific activity of ≥ 1 x 10 ⁵ units/mg, as determined by proliferation of BAF3 cells expressing FGF receptors
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in PBS, pH 7.4.
Endotoxin	< 1EU/µg of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
Usage	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.