

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 GLKKNGSCKR GPRTHYGQKA ILFLPLPVSS D

Source Escherichia coli

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 ED₅₀ is < 10ng/ml, corresponding to a specific activity of ≥ 1 x

10⁵ 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 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 *in vitro*

diagnostic procedures.