

# Genaxxon BioScience

## rHuFGF-b

recombinant Human Fibroblast Growth Factor-basic from *E.coli*

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Product	Cat#	Package size
rHuFGF-b	C6034.0010	10µg
rHuFGF-b	C6034.0050	50µg
rHuFGF-b	C6034.1000	1mg

### Product description

Basic fibroblast growth factor is a member of the fibroblast growth factor (FGF) family. FGF 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, be 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.

Recombinant Human FGF-b produced in *E.coli* is a single, non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular weight of 17353 Dalton. The rHuFGF-b is purified by proprietary chromatography techniques.

**Purity :** Greater than 99.0%, determined by :  
 RP-HPLC chromatography  
 IEX-FPLC chromatography  
 reducing and non-reducing SDS-PAGE (silver stained)

**Source:** *E.coli*

### Formulation

The protein was lyophilised from a concentrated (1mg/mL) sterile solution containing 5 mM Tris (pH 7.5) and 150 mM NaCl.

### Solubility

The lyophilised rHuFGF-b is very soluble in water and most aqueous buffers below and above the isoelectric point (pI = 10). It is recommended to reconstitute the lyophilised Growth Factor in sterile water not less than 100 µg/mL, which can be further diluted to other concentrations.

### Stability

Lyophilised rHuFGF-b although stable at room temperature for 3 weeks, should be stored desiccated at -20°C. Reconstituted rHuFGF-b is best stored refrigerated at +4°C between 2-7 days and at -20°C for long term storage. For long term storage it is recommended to add a carrier protein (e.g. 0.1% HSA or BSA).

### Biological Activity

Genaxxon's rHuFGF-b is fully biologically active when compared to standards. The ED50, calculated by the dose-dependant proliferation of BAF3 cells (measured by 3H-thymidine uptake) is 0.3 ng/mL (limit of acceptance: 0.5 ng/mL), corresponding to a specific activity of  $2 \times 10^6$  units/mg.

**Endotoxin:** less than 0.1 ng/mg (IEU/µg) of rHuFGF-b

### Amino acid sequence

The sequence of the first five N-terminal amino acids was determined to be Ala-Glu-Gly-Glu-Ile

### Synonyms:

Prosatropin, HBGH-2, HBGF-2, FGF-b

### Usage

The Genaxxon rHuFGF-b is offered for research, laboratory or further manufacturing purposes.

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