

## Active GMP Recombinant Human FGF1 protein

Cat. No. FGF1-4344HG Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human FGF1 was produced in E. coli using non-animal reagents in an animal-free facility under cGMP guidelines.

**Species** Human

**Source** E.coli

**Description** Fibroblast Growth Factor-acidic (FGF acidic), also known as FGF-1 and endothelial cell growth factor, is a member of the FGF family of mitogenic peptides which currently is comprised of at least seven proteins which show 35-55% amino acid sequence conservation. FGF acidic and basic, unlike the other members of the family, lack signal peptides and are apparently secreted by mechanisms other than the classical protein secretion pathway. FGF acidic has been detected in large amounts in the brain. Other cells known to express FGF acidic include hepatocytes, vascular smooth muscle cells, CNS neurons, skeletal muscle cells, fibroblasts, keratinocytes, endothelial cells, intestinal columnar epithelium cells and pituitary basophils and acidophils. As with other FGF's, FGF acidic exhibits considerable species crossreactivity. FGF acidic and FGF basic stimulate the proliferation of all cells of mesodermal origin, and many cells of neuroectodermal, ectodermal and endodermal origin.

**Form** Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Bio-activity** The ED50 determined by a cell proliferation assay using murine balb/c 3T3 cells is

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	less than 0.3 ng/mL, corresponding to a specific activity of $>3.3 \times 10^6$ IU/mg in the presence of 10 µg/mL of heparin.
<b>Molecular Mass</b>	Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 141 amino acids.
<b>AA Sequence</b>	MFNLPPGNYKKPKLLYCSNGGHFLRILPDGTVDGTRDRSDQHIQLQLSAESVGEVYI KSTETGQYLAMDTDGLLYGSQTPNEECLFLERLEENHYNTYISKKHAEKNWVGLK KNGSCKRGPRTHYGQKAILFLPLPVSSD
<b>Endotoxin</b>	Less than 1 EU/µg of the protein by LAL method.
<b>Purity</b>	>95% by SDS-PAGE and HPLC analyses.
<b>Storage</b>	This lyophilized preparation is stable at 2-8 centigrade, but should be kept at -20 centigrade for long term storage, preferably des centigradecated. Upon reconstitution, the preparation is stable for up to one week at 2-8 centigrade. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 centigrade to -70 centigrade. Avoid repeated freeze/thaw centigrade centigradeles.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20$ centigrade. Further dilutions should be made in appropriate buffered solutions.
<b>Quality Statement</b>	Our GMP proteins are produced according to relevant sections of the following documents: WHO TRS, No. 822, 1992 Annex 1, Good Manufacturing Practices for Biological Products; USP Chapter 1043, Ancillary Materials for Cell, Gene and Tissue-Engineered Products and USP Chapter 92, Growth Factors and Cytokines Used in Cell Therapy Manufacturing.

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**Shipping**

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

**GENE INFORMATION**
**Gene Name**

FGF1 fibroblast growth factor 1 (acidic) [ Homo sapiens ]

**Official Symbol**

FGF1

**Synonyms**

FGF1; fibroblast growth factor 1 (acidic); FGFA; fibroblast growth factor 1; AFGF; ECGF; ECGF beta; ECGFA; ECGFB; endothelial cell growth factor; alpha; beta; FGF alpha; GLIO703; HBGF1; heparin binding growth factor 1; heparin-binding growth factor 1; beta-endothelial cell growth factor; endothelial cell growth factor, beta; endothelial cell growth factor, alpha; FGF-1; HBGF-1; ECGF-beta; FGF-alpha;

**Gene ID**

2246

**mRNA Refseq**

NM\_000800

**Protein Refseq**


NP\_000791

**MIM**


131220

**UniProt ID**


P05230

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