

## Active Recombinant Human FGF2 Protein (154 aa)

**Cat. No.** FGF2-400F    **Lot. No.** (See product label)

### SPECIFICATION

**Product Overview**      Recombinant human Fibroblast Growth Factor-basic (rhFGF-basic) produced in E. coli is a single non-glycosylated polypeptide chain containing 154 amino acids. A fully biologically active molecule, rhFGF-basic has a molecular mass of 17.1 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.

**Species**      Human

**Source**      E.coli

**ProteinLength**      154

**Description**      Fibroblast Growth Factor-basic (FGF-basic), also known as FGF-2, is a pleiotropic cytokine and one of the prototypic members of the heparin-binding FGF family. Like other FGF family members, bFGF has the  $\beta$  trefoil structure. In vivo, bFGF is produced by a variety of cells, including cardiomyocytes, fibroblasts, and vascular cells. bFGF regulates a variety of processes including cell proliferation, differentiation, survival, adhesion, motility, apoptosis, limb formation and wound healing. bFGF can be tumorigenic due to its role in angiogenesis and blood vessel remodeling. The angiogenic effects of bFGF can produce beneficial cardioprotection during acute heart injury.

**Form**      Sterile Filtered White lyophilized (freeze-dried) powder.

**Bio-activity**      ED50 < 0.25 ng/mL, measured by the cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 4 × 10<sup>6</sup> units/mg.

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<b>Molecular Mass</b>	17.1 kDa, observed by reducing SDS-PAGE.
<b>AA Sequence</b>	AAGSITTLPALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSD PHIKLQLQAEERGVSISIKGVCANRYLAMKEDGRLLASKCVTDECFFFERLESNNYNT YRSRKYTSWYVALKRTGQYKLGSKTGPQKAILFLPMSAKS
<b>Endotoxin</b>	< 0.2 EU/μg, determined by LAL method.
<b>Purity</b>	> 95% by SDS-PAGE analysis.
<b>Storage</b>	Lyophilized recombinant human Fibroblast Growth Factor-basic (rhFGF-basic) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rhFGF-basic remains stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade.
<b>Storage Buffer</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	Reconstituted in ddH <sub>2</sub> O at 100 μg/mL.

## GENE INFORMATION

<b>Gene Name</b>	FGF2 fibroblast growth factor 2 (basic) [ Homo sapiens ]
<b>Official Symbol</b>	FGF2
<b>Synonyms</b>	FGF2; fibroblast growth factor 2 (basic); FGFB; fibroblast growth factor 2; prostatropin; heparin-binding growth factor 2; basic fibroblast growth factor bFGF; BFGF; FGF-2; HBGF-2;
<b>Gene ID</b>	2247

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<b>mRNA Refseq</b>	NM_002006
<b>Protein Refseq</b>	NP_001997
<b>MIM</b>	134920
<b>UniProt ID</b>	P09038

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