

## Active Recombinant Human FGF2 Protein (146 aa)

**Cat. No.** FGF2-401F    **Lot. No.** (See product label)

### SPECIFICATION

**Product Overview**      Recombinant human Fibroblast Growth Factor-basic (146 a.a.) (rhFGF-basic) produced in E. coli is a single non-glycosylated polypeptide chain containing 146 amino acids. A fully biologically active molecule, rhFGF-basic has a molecular mass of 16.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.

**Species**      Human

**Source**      E.coli

**ProteinLength**      146

**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, FGF-basic has the  $\beta$  trefoil structure. In vivo, FGF-basic is produced by a variety of cells, including cardiomyocytes, fibroblasts, and vascular cells. FGF-basic regulates a variety of processes including cell proliferation, differentiation, survival, adhesion, motility, apoptosis, limb formation and wound healing. FGF-basic can be tumorigenic due to its role in angiogenesis and blood vessel remodeling. The angiogenic effects of FGF-basic 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,

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corresponding to a specific activity of  $> 4 \times 10^6$  units/mg.

<b>Molecular Mass</b>	16.4 kDa, observed by reducing SDS-PAGE.
<b>AA Sequence</b>	PALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHIKLQLQ AEERGVVSIKGVCANRYLAMKEDGRLLASKCVTDECFFFERLESNNYNTYRSRKYT SWYVALKRTGQYKLGSKTGPGQKAILFLPMSAKS
<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 (146 a.a.) (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 50 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;

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Gene ID	2247
mRNA Refseq	NM_002006
Protein Refseq	NP_001997
MIM	134920
UniProt ID	P09038

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