

## FGF-basic, Bovine

**Cat. No.:** Z03230-50

**Size:** 50.0 ug

**Synonyms:** FGF-2; BFGF; FGFB; HBGF-2

### 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.

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

### Amino Acid Sequence:

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00001 PALPEDGGSG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV
00041 DGVREKSDPH IKLQLQAEER GVVSIGVCA NRYLAMKEDG
00081 RLLASKCVTD ECVFFERLES NNYNTYRSRK YSSWYVALKR
00121 TGQYKLGPKT GPGQKAILFL PMSAKS
```

**Source:** *E. coli*

**Species:** Bovine

**Biological Activity:** ED<sub>50</sub> < 1.0 ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 1 × 10<sup>6</sup> units/mg.

**Molecular Weight:** 16.4 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

**Purity:** > 95% by SDS-PAGE analysis.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant bovine Fibroblast Growth Factor-basic (rbFGF-basic) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rbFGF-basic remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.