

## FGF-basic (146aa), Human

**Cat. No.:** Z03166-10

**Size:** 10.0 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 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 at GenScript.

### Amino Acid Sequence:

```
00001 PALPEDGGSG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV
00041 DGVREKSDPH IKLQLQAEER GVVSIGVCA NRYLAMKEDG
00081 RLLASKCVTD ECFFFERLES NNYNTYRSRK YTSWYVALKR
00121 TGQYKLGSKT GPGQKAILFL PMSAKS
```

**Source:** *E. coli*

**Species:** Human

**Biological Activity:**  $ED_{50} < 0.25$  ng/mL, measured by the cell proliferation assay using 3T3 cells, corresponding to a specific activity of  $> 4 \times 10^6$  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 50  $\mu$ g/mL.

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

**Endotoxin Level:** < 0.2 EU/ $\mu$ g, determined by LAL method.

**Storage:** Lyophilized recombinant human Fibroblast Growth Factor-basic (146 a.a.) (rhFGF-basic) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhFGF-basic remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.