

FGF-basic (146aa), Human

Cat. No.: Z03166-1

Size: 1.0 mg

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 β 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:

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00001 PALPEDGGSG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV
00041 DGVREKSDPH IKLQLQAEER GVVSIKGVCA NRYLAMKEDG
00081 RLLASKCVTD ECFFFERLES NNYNTYRSRK YTSWYVALKR
00121 TGQYKLGSKT GPGQKAILFL PMSAKS
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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 ddH₂O at 50 μ g/mL.

Purity: > 95% by SDS-PAGE analysis.

Endotoxin Level: < 0.2 EU/ μ 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.