

## FGF-acidic, Mouse

**Cat. No.:** Z03049-1

**Size:** 1.0 mg

**Synonyms:** Fibroblast Growth Factor-acidic, FGF-1, HBGF-1, ECGF-beta

### Description:

Fibroblast Growth Factor- acidic (FGF-acidic) is a mitogen targeting at the endothelial cells, and belongs to the heparin binding FGF family, which contains 22 members. FGF-acidic binds to the receptor family FGFR1-4 in vivo with the assistance of heparin. However, along with FGF -basic, FGF-acidic lacks the signal peptide segment, and thus is not secreted via endoplasmic reticulum (ER) and Golgi bodies. Studies have shown that FGF-acidic is highly regulated, and it is a direct angiogenesis factor. If unregulated, angiogenesis could contribute to several diseases including arthritis, diabetes, ocular neovascularization, and especially tumors. Therefore, FGF-acidic is treated as a potential oncogene, and its overexpression is correlated tightly with several cancers.

Recombinant mouse Fibroblast Growth Factor-acidic (rmFGF-acidic) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 140 amino acids. A fully biologically active molecule, rmFGF-acidic has a molecular mass of 15.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 FNLPLGNYKK PKLLYCSNGG HFLRILPDGT VDGTRDRSDQ
00041 HIQLQLSAES AGEVYIKGTE TGQYLAMDTE GLLYGSQTPN
00081 EECLFLERLE ENHYNTYTSK KHAENWVFG LKKNQSCCKRG
00121 PRTHYGQKAI LFLPLPVSSD
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**Source:** *E. coli*

**Species:** Mouse

**Biological Activity:** ED<sub>50</sub> < 0.4 ng/mL, measured by a cell proliferation assay using 3T3 cells in the presence of 10 µg/mL heparin, corresponding to a specific activity of > 2.5 × 10<sup>6</sup> units/mg.

**Molecular Weight:** 15.8 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 and HPLC analyses.

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

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