

## FGF-basic, Mouse

**Cat. No.:** Z02776-1

**Size:** 1.0 mg

**Synonyms:** Fibroblast Growth Factor-basic ( FGF-basic ), Mouse;

**Description:**

FGF basic (FGF-2, HBGF-2) is one of at least 22 mitogenic proteins of the FGF family, which show 35 - 60% amino acid conservation. Unlike other FGFs, FGF acidic and basic lack signal peptides and are secreted by an alternate pathway. Storage pools within the cell or on cell surface heparan sulfate proteoglycans (HSPG) are likely. The predicted 17 kDa FGF basic isoform can be located in both the cytoplasm and the nucleus and is presumed to be the form secreted. Transcription from alternate start sites produces 21 - 24 kDa forms found only in the nucleus. High and low molecular weight human FGF basic targets the expression of different genes when expressed in NIH-3T3 cells.

**Amino Acid Sequence:**

```
00001 MPALPEDGGA AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV
00041 DGVREKSDPH VKLQLQAEER GVVSIGVCA NRYLAMKEDG
00081 RLLASKCVTE ECVFFERLES NNYNTYRSRK YSSWVVALKR
00121 TGQYKLGSKT GPGQKAILFL PMSAKS
```

**Source:** *E. coli*

**Species:** Mouse

**Biological Activity:** Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by a cell proliferation assay using murine balb/c 3T3 cells is less than 1.0 ng/ml, corresponding to a specific activity of > 1.0 × 10<sup>6</sup> IU/mg.

**Molecular Weight:** Approximately 16.5 kDa, a single non-glycosylated polypeptide chain containing 146 amino acids.

**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.

**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

**Purity:** > 98 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level:** Less than 1 EU/µg of rMubFGF as determined by LAL method.

**Storage:** This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.