



## User Manual

**Fibroblast Growth Factor-basic (bFGF) (Murine)**

**Cat. No. MEGFP-0602(1-4)**

**Description:**

Fibroblast Growth Factor-basic (FGF basic, also called 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.

**Source:**

*Escherichia coli*

**Unit:**

10 µg / 100 µg / 500 µg / 1 mg

**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.

**Formulation:**

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

**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.

### **Molecular Weight:**

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

### **Endotoxin:**

Less than 1 EU/μg of bFGF as determined by LAL method.

### **Usage:**

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

### **Biological Activity:**

The ED50 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  $> 1.0 \times 10^6$  IU/mg.

### **Physical Appearance:**

Sterile filtered white lyophilized (freeze-dried) powder.

### **AA Sequence:**

MPALPEDGGA AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH  
VKLQLQAEER GVVSIGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES  
NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS

**Purity:**

> 98% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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