

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant FGF-basic (154aa), Human

Catalog Number: BK0055-1mg

Source: Escherichia coli.

Quantity: 1mg

### 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, bFGF has the  $\beta$  trefoil structure. In vivo, bFGF is produced by a variety of cells, including cardiomyocytes, fibroblasts, and vascular cells. bFGF regulates a variety of processes including cell proliferation, differentiation, survival, adhesion, motility, apoptosis, limb formation and wound healing. bFGF can be tumorigenic due to its role in angiogenesis and blood vessel remodeling. The angiogenic effects of bFGF can produce beneficial cardioprotection during acute heart injury. Recombinant human Fibroblast Growth Factor-basic (rhFGF-basic) produced in E.coli is a single non-glycosylated polypeptide chain containing 154 amino acids. A fully biologically active molecule, rhFGF-basic has a molecular mass of 17.1 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

17.1 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE analysis.

### Biological Activity:

ED50 < 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.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

AAGSIT-  
TLPALPEDGGSGAFPPGHFKDKPKRLYCKNGGFFL  
RIHPDGRVDGVREKSDPHI-  
KLQLQAEERG VVSIKGVCANRYLAMKED-  
GRL LASKCVTDECFERLESNNYNTYRS-  
RKYTSWYVALKRTGQYKLGSKTGPGQKAIL-  
FLPMSAKS

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100  $\mu$ g/mL.

### Storage:

Lyophilized recombinant human Fibroblast Growth Factor-basic (rhFGF-basic) remains stable up to 6 months at -80 °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.

### Usage:

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