

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant FGF-basic, Rat

Catalog Number: BK0058-50µg

Source: Escherichia coli.

Quantity: 50µg

### 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  $\beta$  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 rat Fibroblast Growth Factor-basic (rrFGF-basic) produced in E.coli is a single non-glycosylated polypeptide chain containing 146 amino acids. A fully biologically active molecule, rrFGF-basic has a molecular mass of 16.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

16.4 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE analysis.

### Biological Activity:

ED50 < 0.25 ng/mL, measured by a 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:

GPALPEDGGGAFPPGHFKDPKRLYCKNGGFFL-  
RIHPDGRVDGVREKS-  
DPHVKLQLQAEERGVSIVKVCANRYLAMKED-  
MKEDGRLASKCVTEECFFFERLESNNYNTYRS-  
GRLASKCVTEECFFFERLESNNYNTYRS-  
RKYSSWYVALKRTGQYKLGSKTGPQKAIL-  
FLPMSAKS

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

### Storage:

Lyophilized recombinant rat Fibroblast Growth Factor-basic (rrFGF-basic) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rrFGF-basic remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

### Usage:

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