

## PRODUCT DATA SHEET



Bioworld Technology, Inc.

### Recombinant Human Fibroblast Growth Factor-basic (rHubFGF )

Catalog Number: PR1028

Source: Escherichia coli.

Quantity: 10µg/50µg/1.0mg

#### Description

bFGF is a single-chain polypeptide growth factor that plays a significant role in the process of wound healing and is a potent inducer of angiogenesis. Several different forms of the human protein exist ranging from 18-24 kDa in size due to the use of alternative start sites within the fgf-2 gene. It has a 55 percent amino acid residue identity to FGF-1 and has potent heparin-binding activity. The growth factor is an extremely potent inducer of DNA synthesis in a variety of cell types from mesoderm and neuroectoderm lineages. It was originally named basic fibroblast growth factor based upon its chemical properties and to distinguish it from acidic fibroblast growth factor. Other homologous FGF belonging to the same family are int-2 ( FGF-3 ), FGF-5 , FGF-6 , K-FGF and KGF ( keratinocyte growth factor =FGF-7 ). All factors are products of different genes, some of which are Oncogene products ( FGF-3 , FGF-4 , FGF-5 ).

#### Molecular Weight:

Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 155 amino acids.

#### Purity:

>96% by SDS-PAGE and HPLC analyses.

#### Biological Activity:

Fully biologically active when compared to standard. The ED50, calculated by the dose-dependant proliferation of BAF3 cells expressing FGF receptors (measured by 3H-thymidine uptake) is <0.5 ng/ml, corresponding to a specific activity of 2.0 x 10<sup>6</sup> Units/mg.

#### Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

#### Formulation:

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

#### AA Sequence:

A A G S I T T L P A L P E D G G S G A F P P G H F K D P  
K R L Y C K N G G F F L R I H P D G R V D G V R E K S  
D P H I K L Q L Q A E E R G V V S I K G V C A N R Y L  
A M K E D G R L L A S K C V T D E C F F F E R L E S N  
N Y N T Y R S R K Y T S W Y V A L K R T G Q Y K L G  
S K T G P G Q K A I L F L P M S A K S

#### Endotoxin:

Less than 1EU/mg of rHubFGF as determined by LAL method.

#### 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.

#### Storage:

This lyophilized preparation is stable for several weeks 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.

#### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

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