

BACKGROUND:

Basic fibroblast growth factor (bFGF), also known as FGF2, is expressed by endothelial cells and is a mediator of angiogenesis. bFGF also has cardioprotective functions during heart injury. bFGF binds heparin in order to signal through fibroblast growth factor (FGF) receptor tyrosine kinases.

Recombinant rat Basic fibroblast growth factor is a non-glycosylated protein monomer, containing 146 amino acids and having a molecular mass of 16.4 kDa.

Cat. No.:

RP3002

Alternate Names:

FGF2, HBGF-2, Prostatropin

AA Sequence:

| | | |
|------------|------------|------------|
| MPALPEDGGG | AFPPGHFKDP | KRLYCKNGGF |
| FLRIHPDGRV | DGVREKSDPH | VKLQLQAEER |
| GVVSIKGVCA | NRYLAMKEDG | RLASKCVTE |
| ECFFFERLES | NNYNTYRSRK | YSSWYVALKR |
| TGQYKLGSKT | GPGQKAILFL | PMSAKS |

TECHNICAL INFO**Source:***E. coli***Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is measured by dose-dependent BALB/c 3T3 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 1 ng/mL.

