

BACKGROUND:

Fibroblast Growth Factors, FGFs, are a 22 member family of proteins known to be involved in angiogenesis, wound healing and embryonic development. As a family, they bind to heparin and signal through four receptor tyrosine kinases called, FGFR1, 2, 3 and 4. Although the mechanism remains unclear, FGF-basic 147 (variant of FGF basic 154) is a critical component in keeping embryonic stem cells undifferentiated in cell culture systems.

Recombinant human FGF-b 147 (FGF-2) is a non-glycosylated protein, containing 147 amino acids, and having a molecular mass of 16.5 kDa.

Cat. No.:
RP1028AF

Alternate Names:
FGF2, HBGF-2, Prostatropin

AA Sequence:

MPALPEDGGS	GAFPFGHFKD	PKRLYCKNGG
FFLRIHPDGR	VDGVREKSDP	HIKLQLQAEI
RGVSIKVC	ANRYLAMKED	GRLASKCVT
DECFERLE	SNNYNTYRSR	KYTSWYVALK
RTGQYKLGSK	TGPGQKAILF	LPMSAKS

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
10 mM sodium phosphate, 75 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. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.

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 5 ng/mL.

Animal Component-Free
This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

