

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.

Alternative Names:

FGF2, HBGF-2, Prostatropin

Amino Acid Sequence:

MAPTAPNGTL EAELERRWES LVALSLARLP VAAQPKEAAV
QSGAGDYLLG IKRLRRLYCN VGIGFHLQAL PDGRIGGAHA
DTRDSLLELS PVERGVVSIF GVASRFFVAM SSKGKLYGSP
FFTDECTFKE ILLPNYNAY ESYKYPGMFI ALSKNGKTKK
GNRVSPTMKV THFLPRL

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human FGF-b is lyophilized from a 10 mM Na₂PO₄, pH 8.0.

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 a concentration of 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 calculated by the dose-dependent proliferation of mouse BALB/c 3T3 cells and is typically less than 1 ng/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

