Recombinant Human FGF-basic 147

(Fibroblast Growth Factor basic 147)

Catalog Number: 100-28

Accession Number: P09038

Specifications and Uses:

Alternate Names: FGF2, HBGF-2, Prostatropin

Description:
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), also called FGF-2, 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, with a molecular weight of 16.5 kDa.

Source: *E.coli*

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

Formulation and Stability:
Recombinant human FGF-basic is lyophilized from a 10 mM Na_2PO_4, pH 8.0.
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 (typically ≥ 97%) determined by:
Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:
Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.

Biological Activity:
The activity is determined by the dose-dependent proliferation of mouse BALB/c 3T3 cells and is typically less than 1 ng/mL.

AA Sequence:
MPALPEDGGS GAFPPGHFKD PKRLYCKNGG FFLRIHPDGR VDGVREKSDP HIKLQLQAEE RGVVSIKGVC ANRYLAMKED GRLLASKCVT DECFFFERLE SNNYNTYRSR KYTSWYVALK RTGQYKLGSK TGPGQKAILF LPMSAKS

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!