

Recombinant Mouse FGF-basic

(Fibroblast Growth Factor basic)

Catalog Number: 200-12
Accession Number: P15655

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, or FGF-1, is a critical component in keeping human embryonic stem cells undifferentiated in cell culture systems. Recombinant mouse FGF basic is a non-glycosylated protein, containing 145 amino acids, with a molecular weight of 16.3 kDa.

Source: E.coli

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

Formulation and Stability:

Recombinant mouse FGF basic is lyophilized from 5 mM Na₂PO₄, pH 7.5 and 50 mM NaCl. 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 \geq 95%) determined by:

Reducing and Non-reducing SDS-PAGE

Endotoxin Level:

Measured by kinetic LAL analysis and is typically $\leq 1 \text{ EU/µg}$ protein.

Biological Activity:

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

AA Sequence:

MPALPEDGGA AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS

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

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