RECOMBINANT HUMAN
FGF-basic 154 ACF

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RECOMBINANT HUMAN FGF-basic 154 ACF

Catalog No. 95109

INTENDED USE

Recombinant human FGF-basic 154 is a carrier-free, animal component-free bioactive recombinant cytokine intended for use in cell culture applications. FGF-basic is a member of FGF family of growth factors involved in variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair and tumor growth.

PRODUCT DESCRIPTION

1. **Synonyms**
   FGF2, HBGF-2, Prostatropin

2. **Accession Number**
   P09038

3. **Background**
   Fibroblast growth factor is a member of fibroblast growth family that includes 22 proteins. This large family of structurally related proteins binds heparin and heparin sulfate and modulates the growth, differentiation, migration and survival of a wide variety of cell types. FGF basic is a critical component in keeping pluripotent stem cells undifferentiated in cell culture systems. Recombinant human FGF-basic 154 is a non-glycosylated protein, containing 154 amino acids, with a molecular weight of 17.2 kDa (1-4).

4. **Specifications**
   Formulation
   Recombinant human FGF-basic 154 is lyophilized from 10 mM Na_2PO_4, pH 8.0.

   Protein content and Purity
   ≥95% determined by HPLC, reducing and non reducing SDS-PAGE analysis, UV spectroscopy.

   Bioactivity
   ED50 is determined by a dose dependant proliferation of mouse BALB/c 3T3 cells (5). The ED50 is typically 2-3ng/mL.

   Quality and Grade
   Carrier-free. Animal component-free.

SHIPPING

This product is shipped at ambient temperature. Immediately upon receipt, store at the recommended temperature below.

STORAGE INSTRUCTIONS AND STABILITY

Upon receipt, store the lyophilized protein at or below -10°C in a manual defrost freezer for up to 12 months from date of receipt. Unopened vials are stable for one year from the date of receipt when stored as recommended. Reconstituted material should be apportioned in working volumes and stored at or below -10°C in manual defrost freezer. Reconstituted material is stable for 4-6 weeks when stored at or below -10°C and for 3-12 months at -80°C. Stability can be increased by adding at least 0.1% of carrier protein.

PRECAUTIONS AND WARNINGS

This product is for research or further manufacturing use only. It is not for use in diagnostic procedures. The safety and efficacy of this product in diagnostic or other clinical procedures has not been established.

DIRECTIONS FOR USE

1. **Reconstitution**
   Centrifuge vials 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, which can be further diluted into other aqueous solutions.

2. **Optimum concentration**
   The optimum concentration varies depending on cell type and culture conditions. Working concentration should be determined for each specific application.

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