Certificate of Analysis

Recombinant Human FGF-basic 147 / FGF-2
Catalog Number: 100-28
Lot Number: 1117-100-28

Product Description

Alternate Names: FGF2, HBGF-2, Prostatropin **Accession/Uniprot Number:** P09038

Description: Basic fibroblast growth factor (FGF-basic), also known as FGF-2, is expressed by endothelial cells and is a mediator of angiogenesis. FGF-basic also has cardioprotective functions during heart injury. FGF-basic is a critical component for embryonic stem cell culture systems and is necessary for maintaining cells in an undifferentiated state. Degredation of the full length FGF-basic N-terminus results in a truncated FGF-basic 147aa protein, when the protein is isolated from biological sources. The N-terminus extensions influence the localization of FGF-basic within the cell, but do not affect the biological activity of FGF-basic. Therefore, there are no detectable differences in biological activity between the full length FGF-basic 154aa and the truncated FGF-basic 147aa recombinant proteins.

Source: Genetically modified *E.coli*.

Predicted MW: Monomer, 16.5 kDa (147 amino acids)

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

Formulation: Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 75 mM sodium chloride, pH 7.5

Product Specifications

Specification	Method of Determination	Acceptance Criteria	Result
Purity	Reducing and Non-reducing SDS-PAGE	≥95%	>95%
Endotoxin	Kinetic LAL (50% confidence)	≤ 1 EUs/ug	<0.070 EUs/ug
Biological Activity	NR6R 3T3 cell proliferation	ED50 ≤ 5 ng/mL (≥2.0 x 10^5 units/mg)	ED50 = 0.314 ng/mL (3.2 x 10^6 units/mg)

Product Preparation and Storage

Country of Origin: USA **Shipping:** Room temperature **Storage Prior to Reconstitution:** -20°C

Reconstitution: Sterile water at 0.1 mg/mL Date of Recon.:_____ Initials: _____

Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vialed to compensate for this loss.

Expiration Date: Date Received: _____

12 months from date of receipt when stored at -20°C to -80°C as supplied.
1 month when stored at 4°C after reconstituting as directed.
3 months when stored at -20°C to -80°C after reconstituting as directed.

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

X Olivia Schneider, PhD 1-18-18

Quality Assurance