

## 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*. **This product is produced with no animal or human origin raw products. All processing and handling employs animal free equipment and animal free protocols.**

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

**AA Sequence:** MPALPEDGGS GAFPPGHFKD PKRLYCKNGG FFLRIHPDGR VDGVREKSDP HIKLQLQAE E RGVVSIKGV C ANRYLAMKED GRLLASKCVT DECFFFERLE SNNYNTYRSR KYTSWYVALK RTGQYKLGSK TGPQKAILF 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
<b>Purity</b>	Reducing and Non-reducing SDS-PAGE	≥95%	>95%
<b>Endotoxin</b>	Kinetic LAL (50% confidence)	≤ 1 EUs/ug	<0.050 EUs/ug
<b>Biological Activity</b>	NR6R-3T3 cell proliferation	ED50 ≤ 5 ng/mL (≥ 2.0 x 10 <sup>5</sup> units/mg)	ED50 = 0.0838 ng/mL (1.2 x 10 <sup>7</sup> 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.

**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.

*Jane Charles (2019-01-21)*

QA Reviewer (YYYY-MM-DD)

*Pamela De Lacy (2019-01-29)*

QC Reviewer (YYYY-MM-DD)

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