

## GFR2AF Recombinant Rat FGF-2 (Animal-Free)

### Description

Fibroblast Growth Factor 2 (FGF-2) is expressed by endothelial cells and is a mediator of angiogenesis. FGF-2 also has cardioprotective functions during heart injury. The application of FGF-2 is a critical component for human embryonic stem cell culture systems and is necessary for maintaining human embryonic stem cells in an undifferentiated state.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

<b>Length</b>	146 aa
<b>Molecular Weight</b>	16.4 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P13109
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

### Specifications

<b>Alternative Names</b>	Fibroblast Growth Factor 2, FGF2, FGF 2, HBGF-2, basic fibroblast growth factor, heparin-binding growth factor 2, FGFB, BFGF, bFGF, prostatropin
<b>Biological Activity</b>	Rat FGF-2 is fully biologically active when compared to standard. The activity is determined by the dose-dependent induced proliferation of NR6R 3T3 cells and it is typically less than 1 ng/ml. This corresponds to an expected specific activity of $1.0 \times 10^6$ units/mg.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5
<b>AA Sequence</b>	MPALPEDGGG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS

### Preparation and Storage

<b>Reconstitution</b>	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 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	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.