

GFH28 Recombinant Human FGF-2 (147)

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 embryonic stem cell culture systems and is necessary for maintaining cells in an undifferentiated state. Degredation of the full length FGF-2 N-terminus results in a truncated FGF-2 147 amino acids protein, when the protein is isolated from biological sources. The N-terminus extensions influence the localization of FGF-2 within the cell, but do not affect the biological activity of FGF-2. Therefore, there are no detectable differences in biological activity between the full length FGF-2 154 amino acids and the truncated FGF-2 147 amino acids recombinant proteins.

Length	147 aa
Molecular Weight	16.5 kDa
Source	E. coli
Accession Number	P09038
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

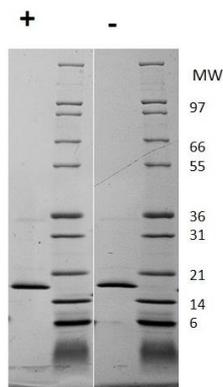
Specifications

Alternative Names	Fibroblast Growth Factor 2, FGF2, FGF 2, HBGF-2, basic fibroblast growth factor, heparin-binding growth factor 2, FGFB, BFGF, bFGF, prostatropin
Biological Activity	Human FGF-2 (147) 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 5 ng/ml. This corresponds to an expected specific activity of 2.0×10^5 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 75 mM sodium chloride, pH 7.5
AA Sequence	MPALPEDGGS GAFPPGHFKD PKRLYCKNGG FFLRIHPDGR VDGVREKSDP HIKLQLQAE E RGVVSIKGV C ANRYLAMKED GRL LASKCVT DECFERLE SNNYNTYRSR KYTSWYVALK RTGQYKLGSK TPGQKAILF LPMSAKS

Preparation and 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 0.1 mg/ml, which can be further diluted into other aqueous solutions. If a precipitate is observed, centrifuge the solution thoroughly and use only the soluble fraction (removing it from the precipitate). A 10% overfill has been added to compensate for any loss of protein in the precipitate.
Stability and Storage	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.

Data



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane.
Human FGF-2 (147) has a predicted Mw of 16.5 kDa.