

GFH29 Recombinant Human FGF-1

Description

Fibroblast Growth Factor 1 (FGF-1) is a potent inducer of DNA synthesis, cell proliferation, and has chemotactic activities. FGF-1 regulates cardiogenesis through protein kinase C signaling. FGF-1 also functions as an insulin sensitizer and mediates adipose tissue remodeling. Other homologous FGF belonging to the same family are FGF-3, FGF-5, FGF-6, K-FGF and FGF-7.

Length	141 aa
Molecular Weight	16 kDa
Source	E. coli
Accession Number	P05230
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

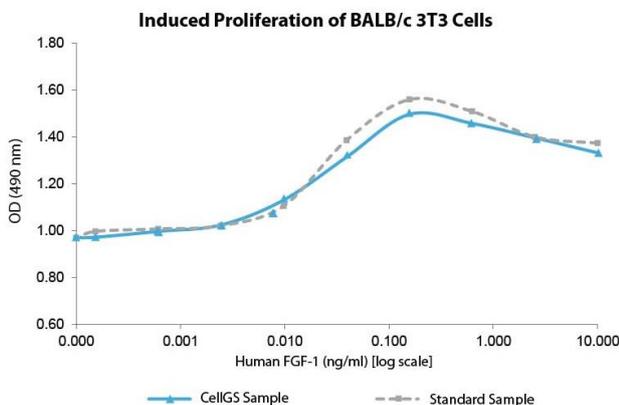
Specifications

Alternative Names	Fibroblast Growth Factor 1, acidic Fibroblast Growth Factor, FGF1, HBGF-1, β-endothelial growth factor, ECGF, endothelial cell growth factor-β, ECGF-β, GLIO703, FGFA, ECGFA, HBGF, heparin-binding growth factor 1, AFGF, endothelial cell growth factor-α, ECGFB, FGF-α, aFGF
Biological Activity	Human FGF-1 is fully biologically active when compared to standard. The activity is determined by the proliferation of BALB/c 3T3 cells and it is typically less than 2 ng/ml. This corresponds to an expected specific activity of 5.0 x 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, 150 mM sodium sulfate, pH 7.5
AA Sequence	MFNLPPGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD QHIQLQLSAE SVGEVYIKST ETGQYLAMDT DGLLYGSQTP NEECLFLERL EENHYNTYIS KKHAENWFW GLKKNKSGCKR GPRTHYGQKA ILFLPLPVSS D

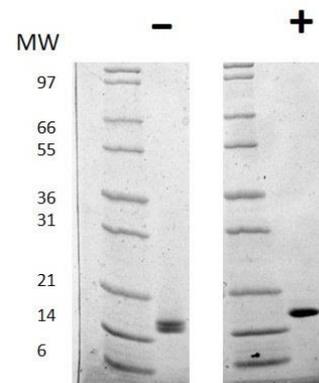
Preparation and Storage

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



Induced proliferation of BALB/c 3T3 cells assay for Human FGF-1. Cell proliferation was measured to calculate the ED50, which is as expected less than 2 ng/ml.



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-1 has a predicted Mw of 16 kDa.