

GFH31 Recombinant Human FGF-4

Description

Fibroblast Growth Factor 4 (FGF-4) is a secreted growth factor that is predominantly expressed during bone morphogenesis and embryonic limb development. FGF-4 is an important growth regulator for stem cells, fibroblasts, and endothelial cells. FGF-4 contains a single N-linked glycosylation signal. However, in vitro studies suggest that unglycosylated FGF-4 is cleaved into 13 kDa and 15 kDa truncated proteins that have greater biological activity than the wild type 19 kDa FGF-4 protein. Human FGF-4 shares high homology and is cross-reactive with mouse FGF-4.

Length	177 aa
Molecular Weight	19.4 kDa
Source	E. coli
Accession Number	P08620
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

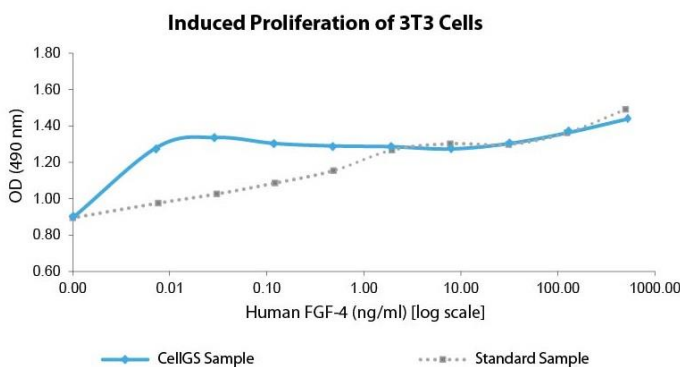
Specifications

Alternative Names	Fibroblast Growth Factor 4, FGF4, FGF 4, transforming protein KS3, HBGF-4, HST-1
Biological Activity	Human FGF-4 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 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, 75 mM sodium chloride, pH 7.5
AA Sequence	MAPTAPNGTL EAELERRWES LVALSLARLP VAAQPKEAAV QSGAGDYLLG IKRLRRLYCN VGIGFHLQAL PDGRIGGAHA DTRDSLLELS PVERGVVSIF GVASRFFVAM SSKGKLYGSP FFTDECTFKE ILLPNNYNAY ESYKYPGMFI ALSKNGKTKK GNRVSPMKV THFLPRL

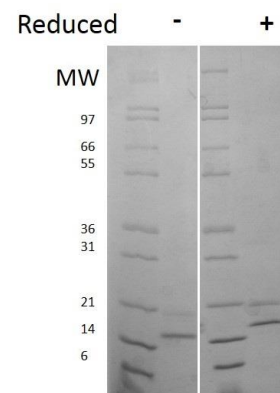
Preparation and Storage

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.
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 3T3 cells assay for Human FGF-4. Cell proliferation was measured to calculate the ED50, which is as expected less than 1 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-4 has a predicted Mw of 19.4 kDa.