

GFH500 Recombinant Human FGF-5

Description

Fibroblast Growth Factor 5 (FGF-5) is a secreted heparin-binding growth factor that binds to FGF receptors FGFR1 and FGFR2. FGF-5 is expressed in the mesenchyme, skeletal muscles, central nervous system, and hair follicles to promote cell differentiation and proliferation. FGF-5 functions as a regulatory factor during hair elongation and skeletal muscle development.

Length	252 aa
Molecular Weight	27.7 kDa
Source	E. coli
Accession Number	P12034
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

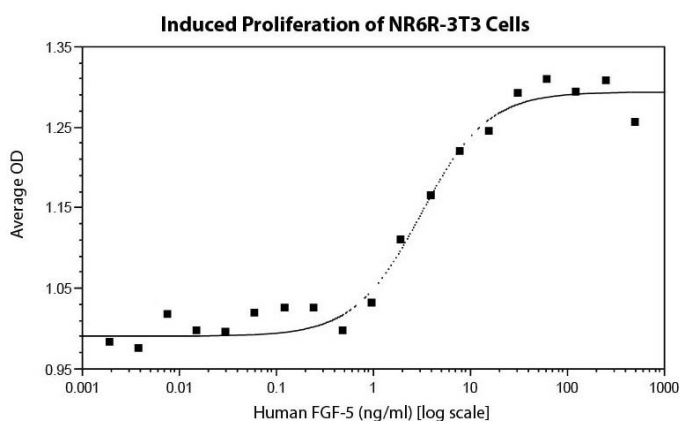
Specifications

Alternative Names	Fibroblast Growth Factor 5, FGF5, FGF 5, heparin-binding growth factor 5, HBGF-5, Smag-82
Biological Activity	Human FGF-5 is fully biologically active when compared to standard. The activity is determined by the dose-dependent induced proliferation of NR6R-3T3 cells with 1 µg heparin and it is typically less than 10 ng/ml. This corresponds to an expected specific activity of 1.0 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, 100 mM sodium chloride, pH 7.5
AA Sequence	MAWAHGEKRL APKGQPGPAA TDRNPIGSSS RQSSSSAMSS SSASSSPAAS LGSQGSGLAQ SSFQWSPSGR RTGSLYCRVG IGFHLQIYPD GKVNGSHEAN MLSVLEIFAV SQGIVGIRGV FSNKFLAMSK KGKLHASAKF TDDCKFRERF QENSYNTYAS AIHRTEKTGR EWYVALNKRK KAKRGCSPRV KPQHISTHFL PRFKQSEQPE LSFTVTVPBK KNPPSPIKSK IP

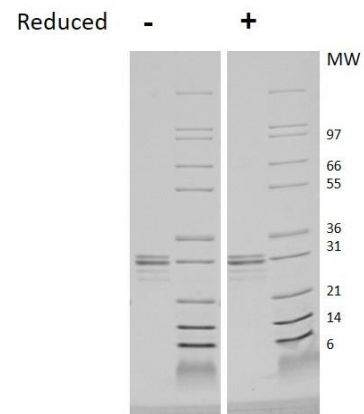
Preparation and Storage

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 NR6R-3T3 cells assay for Human FGF-5. Cell proliferation was measured to calculate the ED50, which is as expected less than 10 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-5 has a predicted Mw of 27.7 kDa.