

GFH187AF Recombinant Human FGF-7 / KGF (Animal-Free)

Description

Fibroblast Growth Factor 7 (FGF-7), also known as Keratinocyte Growth Factor (KGF), is a potent mitogen that regulates epithelial cell migration and differentiation. FGF-7 is produced by mesenchymal cells and binds in high affinity to a splice variant of FGF receptor 2 (FGFR2-IIIb). The mitogenic activity of FGF-7 acts predominantly on keratinocytes, but not on fibroblast or endothelial cells. FGF-7 expression is upregulated after acute and chronic injury, suggesting that FGF-7 functions during the healing of injured epithelial cells. FGF-7 also induces the formation of the apical ectoderm ridge during limb development.

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

Length	164 aa
Molecular Weight	19 kDa
Source	E. coli
Accession Number	P20781
Purity	≥90% determined by reducing and non-reducing SDS-PAGE

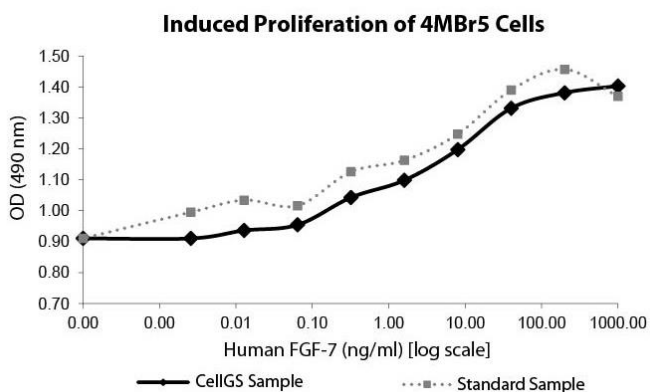
Specifications

Alternative Names	Fibroblast Growth Factor 7, FGF7, FGF 7, KGF, Keratinocyte Growth Factor
Biological Activity	Human FGF-7 is fully biologically active when compared to standard. The activity is determined by the dose-dependent proliferation of 4MBr-5 cells and it is typically less than 60 ng/ml. This corresponds to an expected specific activity of 1.7×10^4 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	MCNDMTPEQM ATNVNCSPE RHTRSVDYME GDIRVRRLF CRTQWYLRID KRGKVKGTQE MKNNYNIMEI RTVAVGIVAI KGVESSEFYLA MNKEGKLYAK KECNEDCNFK ELILENHNT YASAKWTHNG GEMFVALNQG GIPVRGKTK KEQKTAHFLP MAIT

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 4MBr-5 cells assay for Human FGF-7. Cell proliferation was measured to calculate the ED50, which is as expected less than 60 ng/ml.