

GMP HumanKine[®] FGF-4 (Recombinant Human)



Animal Component-Free	Human cell expressed	Tag-Free	Endotoxin Free
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Product Description

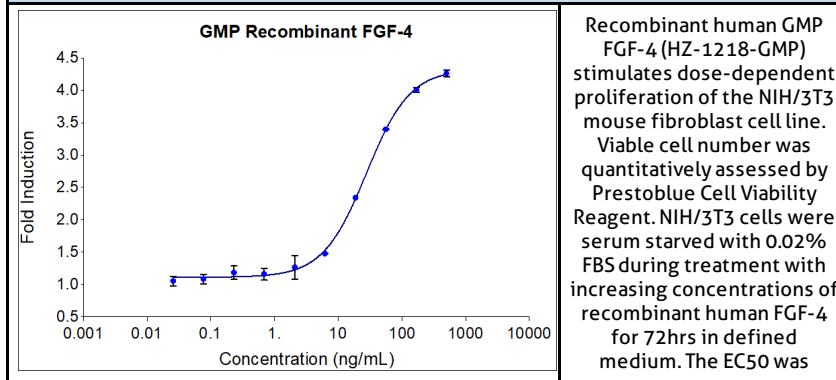
Animal-free Recombinant Human FGF-4 is expressed in human 293 cells as a monomeric glycoprotein with an apparent molecular mass of 17 and 27 kDa. This cytokine is produced in a human cell expression system with serum-free, chemically defined media. Authentic glycosylation contributes to stability in cell growth media and other applications. FGF-4 plays an important physiological role in the self-renewal of human embryonic stem cells. It also promotes stem cell proliferation. Furthermore, FGF-4 may also aid differentiation which additionally relies on context and concentration.

Alternative Names	FGF 4, FGF4, FGF-4, fibroblast growth factor 4, HBGF 4, HST, HST 1, HSTF 1, HSTF1, K FGF, KFGF, KS3, Transforming protein KS3
Accession Number	P11403
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived FGF-4 protein
Adventitious Virus	Master Cell Bank tested Negative for Adventitious Viruses

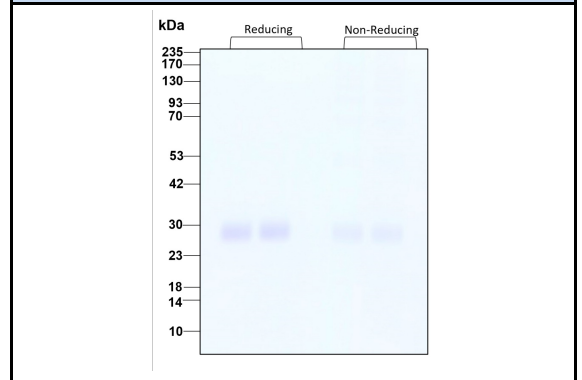
Specifications

Test	Method	Specification
Activity	Dose-dependent stimulation of the proliferation of the Balb/c 3T3 cell line. Dose-Dependent Proliferation of the NIH3T3 cell line in defined media	6-30 ng/mL in NIH 3T3 cells in defined media
Molecular Mass	SDS-PAGE	17 and 27 kDa, monomer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<0.1 EU/ μ g
Mycoplasma	PCR	Not Detected

Activity Data



SDS-PAGE



Preparation	
Shipping Temperature	ambient temperature
Formulation	1x PBS, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4. Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

Proteintech GMP Quality Policy HumanKine® GMP Proteins

In vitro recombinant protein production can be prone to variability due to various reasons ranging from quality of raw materials to inconsistency in the process. Therefore, HumanKine®, a proteintech brand's GMP proteins are produced and tested under an ISO 13485 certified quality management system in a clean room facility. Proteintech manufactures the GMP HumanKine® products according to the applicable sections in the following documents: USP Chapter 1043 (Ancillary Materials for Cell, Gene, and Tissue-Engineered Products, USP Chapter 92 (Growth Factors and Cytokines Used in Cell Therapy Manufacturing), WHO TRS, No. 822, 1992 Annex 1 (Good Manufacturing Practices for Biological Products), Ph. Eur. General Chapter 5.2.12, and EudraLex – Volume 4 – Part IV (Guidelines on GMP specific to ATMPs). Proteintech strives to achieve the utmost quality GMP raw material ensuring all applicable guidelines are taken into consideration.

The QMS is built to provide our customers with consistent and pure product delivered by documented processes, qualified personnel, validated processes, qualified equipment, qualified vendors, and a stringent final product release process. Although the final product release process is important, Proteintech performs in-process QC steps after each major manufacturing stage. Production records and facilities may be available for an inspection by approved personnel.

Our GMP policy covers all the aspects of production; from raw materials, facility, equipment, and Instruments to training and personal hygiene of staff. It also guarantees that the process is explicit, validated and well documented for transparency and traceability.

www.ptglab.com

Document #: FR-QA118-101 Rev 0
Data Sheet Version #:

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