

BACKGROUND:

Fibroblast growth factor 7 (FGF7), also known as keratinocyte growth factor (KGF), is a potent mitogen that regulates epithelial cell migration and differentiation. FGF7 is produced by mesenchymal cells and binds in high affinity to a splice variant of FGF receptor 2 (FGFR2-IIIb). The mitogenic activity of FGF7 acts predominantly on keratinocytes, but not on fibroblast or endothelial cells. FGF7 expression is upregulated after acute and chronic injury, suggesting that FGF7 functions during the healing of injured epithelial cells. FGF7 also induces the formation of the apical ectoderm ridge during limb development.

Recombinant human Fibroblast growth factor 7 is a non-glycosylated protein monomer, containing 164 amino acids and having a molecular mass of 19.0 kDa.

Cat. No.:
 RP1187AF

Alternate Names:
 KGF

AA Sequence:

MCNDMTPEQM	ATNVNCSPE	RHTRSYDME
GGDIRVRRLF	CRTQWYLRI	KRGKVKGTQE
MKNNYNIMEI	RTVAVGIVAI	KGVESEFYLA
MNKEGKLYAK	KECNEDCNFK	ELILENHNT
YASAKWTHNG	GEMFVALNQK	GIPVRGKKT
KEQKTAHFLP	MAIT	

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
 Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
 10 mM sodium phosphate, 100 mM sodium chloride, pH 7.5

Stability:
 Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term 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.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
 Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
 The activity is measured by dose-dependent 4MBr-5 cell proliferation, with acceptance Criteria ED50 at 60 ng/mL.

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

