

# Recombinant Human FGF-7/HBGF-7/KGF Protein

Catalog No.: RP01717 Recombinant

## **Sequence Information**

Species Gene ID Swiss Prot Human 2252 P21781-1

**Tags** C-6His

Synonyms

KGF; HBGF-7;FGF7

### **Product Information**

**Source** Purification HEK293 cells ≥ 90 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

19.72 kDa 15-25 kDa,26-30

kDa

# **Endotoxin**

< 0.01 EU/ $\mu$ g of the protein by LAL method

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### Contact

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# **Background**

Fibroblast growth factor 7 (FGF7) is a member of the fibroblast growth factor (FGF) family of proteins. FGF7 plays an important role in regulating the proliferation, migration, and differentiation of cells. FGF7 is of stromal origin and produces a paracrine effect on epithelial cells. FGF7 is a mesenchyme-specific heparin-binding growth factor that binds FGF receptor 2 (FGFR2) to regulate numerous cellular and physiological processes. FGF7/FGFR2 promotes invasion and migration in human gastric cancer. FGF7 is specifically utilized as a paracrine factor during the process of differentiation of the epidermal layers in the regenerating scales and in particular for beta-cells differentiation. FGF7 over expression is associated with advanced clinical features in patients with upper tract and bladder urothelial carcinoma, justifying its potential prognostic value for urothelial carcinoma.

## **Basic Information**

#### Description

Recombinant Human FGF-7/HBGF-7/KGF Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Cys32-Thr194) of human FGF-7/HBGF-7 (Accession #NP 002000.1) fused with His tag at the C-terminus.

#### **Bio-Activity**

Measured in a cell proliferation assay using 4MBr-5 rhesus monkey epithelial cells. The ED50 for this effect is 2.19-8.76 ng/mL, corresponding to a specific activity of  $1.14 \times 105 \sim 4.57 \times 105$  units/mg.

#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

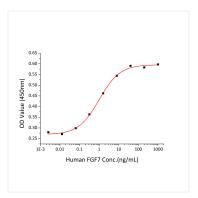
Avoid repeated freeze/thaw cycles.

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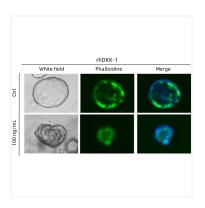
### **Validation Data**



Recombinant Human FGF-7/HBGF-7/KGF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Measured in a cell proliferation assay using 4MBr-5 rhesus monkey epithelial cells. The ED $_{50}$  for this effect is 2.19-8.76 ng/mL, corresponding to a specific activity of  $1.14 \times 10^5 \sim 4.57 \times 10^5$  units/mg.



Human kidney organoids were cultured with EGF(Cat. RP03287), FGF2(Cat. RP01042), FGF7(Cat. RP01717), FGF9(Cat. RP01710), FGF10(Cat. RP01140), IGF-(Cat. RP00996), NOG(Cat. RP01237), RSP01(Cat. RP00071), WNT-3a(Cat. RP01618SLQ). And further, DKK-1(RP01343) was used to induce the establishment of cell polarity.