

## Recombinant Mouse FGF-7/KGF

**CATALOG #:** 4051-10 10 µg  
4051-50 50 µg  
4051-1000 1 mg

**LOT #:** \_\_\_\_\_

**SYNONYMS:** HBGF-7, FGF7, FGF-7, KGF, Keratinocyte growth factor, Fibroblast growth factor 7, Heparin-binding growth factor 7.

**SOURCE:** *E. coli*

**PURITY:** > 95 % by SDS-PAGE and RP-HPLC

**FORM:** Lyophilized from a sterile filtered solution containing 20 mM Phosphate buffer pH 8 containing 0.1M NaCl.

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile ddH<sub>2</sub>O to a concentration ≥ 100 µg/ml. This solution can then be diluted into other aqueous buffers.

### STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated at -20°C. Reconstituted mouse FGF-7 can be stored at 4°C for 2-7 days and at -20°C for future use. For long term storage it is recommended to add a carrier protein (0.1 % HSA or BSA). Avoid freeze/thaw cycles.

### DESCRIPTION:

KGF (Keratinocyte Growth Factor-1) is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-7 is a potent epithelial cell-specific growth factor, whose mitogenic activity is predominantly exhibited in keratinocytes but not in fibroblasts and endothelial cells. Studies of mouse and rat homologs of this gene implicated roles in morphogenesis of epithelium, re-epithelialization of wounds, hair development and early lung organogenesis. Mouse recombinant FGF-7 produced in *E.coli* is a single, non-glycosylated, polypeptide chain containing 164 amino acids and having a molecular mass of 18.9 kDa. The FGF-7 is purified by proprietary chromatographic techniques.

### AMINO ACID SEQUENCE:

MCNDMSPEQT ATSVNCSSPE RHTRSYDYME GDIRVRRFLF CRTQWYLRID  
KRGKVKGTQE MKNSYIMEI RTVAVGIVAI KGVESYYLA MNKEGKLYAK KECNEDCNFK  
ELILENHNT YASAKWTHSG GEMFVALNQG GIPVKGKTK KEQKTAHFLP MAIT

### BIOLOGICAL ACTIVITY:

The ED<sub>50</sub>, calculated by the dose-dependant stimulation of KGF-responsive BaF3 indicator cells (measured by <sup>3</sup>H-thymidine uptake) is < 10 ng/ml corresponding to a specific activity of 100,000 Units/mg.

**FOR RESEARCH USE ONLY! Not to be used in humans.**

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