

# **Keratinocyte Growth Factor, mouse recombinant (rmKGF)**

Catalog No: 97366 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** HBGF-7, FGF-7, KGF, Keratinocyte growth factor, Fibroblast growth factor 7, Heparin-binding

growth factor 7

#### **Background**

KGF 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. FGF7 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, reepithelialization of wounds, hair development and early lung organogenesis.

#### Description

Keratinocyte Growth Factor-1 mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 164 amino acids and having a molecular mass of 18.9 kDa. FGF-7 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

The protein was lyophilized from a concentrated (1 mg/ml) solution containing 20 mM phosphate buffer pH 8 and 0.1 M NaCl.

# Solubility

It is recommended to reconstitute the lyophilized KGF in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Stability

Lyophilized KGF, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF7 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

# Purity

Greater than 95.0% as determined by (a) Analysis by HPLC, (b) Analysis by SDS-PAGE.

# **Amino Acid Sequence**

MCNDMSPEQT ATSVNCSSPE RHTRSYDYME GGDIRVRRLF CRTQWYLRID KRGKVKGTQE MKNSYNIMEI RTVAVGIVAI KGVESEYYLA MNKEGKLYAK KECNEDCNFK ELILENHYNT YASAKWTHSG GEMFVALNQK GIPVKGKKTK KEQKTAHFLP MAIT





# Activity

The ED50, calculated by the dose-dependant stimulation of KGF-responsive BaF3 indicator cells (measured by 3H-thymidine uptake) is <10 ng/ml corresponding to a specific activity of 100,000 units/mg.

# Usage

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