

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant KGF/FGF-7, Mouse

Catalog Number: BK0117-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

Keratinocyte Growth Factor (KGF) is a highly specific epithelial mitogen produced by fibroblasts and mesenchymal stem cells. KGF belongs to the heparin binding Fibroblast Growth Factor (FGF) family, and is known as FGF-7. However, in contrast to FGF-1, which binds to all known FGF receptors with high affinity, KGF only binds to a splice variant of the FGF receptor, FGFR2-IIIb. FGFR2-IIIb is expressed by most epithelial cells, indicating KGF's role as a paracrine mediator. KGF induces the differentiation and proliferation of various epithelial cells such as keratinocytes in the epidermis, hair follicles and sebaceous glands. KGF is also responsible for wound repair of various tissues including lung, bladder, and kidney. Recombinant mouse Keratinocyte Growth Factor (rmKGF) produced in E.coli is a single non-glycosylated polypeptide chain containing 163 amino acids. A fully biologically active molecule, rmKGF has a molecular mass of 18.7 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

18.7 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE and HPLC analyses.

### Biological Activity:

ED50 < 2 ng/ml, measured by a cell proliferation assay using 4MBr-5 cells, corresponding to a specific activity of > 5.0 × 10<sup>5</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

CNDMSPEQTATSVNCSSPERHTRS YDMEGG-  
DIRVRLFCRTQWYLRIDKRGKVKGTQEMKN-  
SYNIMEIRTVAVGIVA IKGVESEYYLAM-  
AM-  
NKEGKLYAKKECNEDCNFKELILENHYNTYASA  
KWT HSGGEMFVAL-  
NQKGIPVKGKTKKEQKTAHFLPMAIT

### Endotoxin:

< 0.2 EU/μg, determined by LAL method.

### Reconstitution:

Reconstituted in PBS at 100 μg/ml.

### Storage:

Lyophilized recombinant mouse Keratinocyte Growth Factor (rmKGF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rmKGF remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

### Usage:

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