

KGF/FGF-7, Mouse

Cat. No.: Z03154-50

Size: 50.0 ug

Synonyms: Fibroblast Growth Factor-7, HBGF-7

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.

Amino Acid Sequence:

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00001 CNDMSPEQTA TSVNCSSPER HTRSVDYMEG GDIRVRRFLFC
00041 RTQWYLRIDK RGKVKGTQEM KNSYNIMEIR TVAVGIVAIAK
00081 GVESEYYLAM NKEGKLYAKK ECNEDCNFKE LILENHYNTRY
00121 ASAKWTHSGG EMFVALNQKG IPVKGKKTKK EQKTAHFLPM
00161 AIT
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Source: *E. coli*

Species: Mouse

Biological Activity: ED₅₀ < 2 ng/ml, measured by a cell proliferation assay using 4MBr-5 cells, corresponding to a specific activity of > 5.0 × 10⁵ units/mg.

Molecular Weight: 18.7 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in PBS at 100 µg/ml.

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant mouse Keratinocyte Growth Factor (rmKGF) remains stable up to 6 months at lower than -70°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.