Active Recombinant Human FGF7 Protein (181 aa), N-His-tagged

Cat. No. FGF7-346F **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human Keratinocyte Growth Factor (rhKGF) with N-terminal His-tag produced in E. coli is a single non-glycosylated polypeptide chain containing 181 amino acids. A fully biologically active molecule, rhKGF has a molecular mass of 21.2 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.
Species	Human
Source	E.coli
ProteinLength	181
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 the FGF-1, which binds to all known FGF receptors with high affinity, KGF only binds to a splice variant of an FGF receptor, FGFR2-IIIb. FGFR2-IIIb is produced by most of the epithelial cells, indicating that KGF plays roles as a paracrine mediator. KGF induces the differen-tiation and proliferation of various epithelial cells, including keratinocytes in the epidermis, hair follicles and sebaceous glands, and is responsible for the wound repairs of various tissues, including lung, bladder, and kidney.
Form	Sterile Filtered White lyophilized (freeze-dried) powder.

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Bio-activity	ED50 < 10 ng/mL, measured by a cell proliferation assay using 4MBr-5 cells, corresponding to a specific activity of > 1.0 × 10^5 units/mg.
Molecular Mass	21.2 kDa, observed by reducing SDS-PAGE.
AA Sequence	MNHKVHHHHHHMDDDDKMCNDMTPEQMATNVNCSSPERHTRSYDYMEGGDIRV RRLFCRTQWYLRIDKRGKVKGTQEMKNNYNIMEIRTVAVGIVAIKGVESEFYLAMNK EGKLYAKKECNEDCNFKELILENHYNTYASAKWTHNGGEMFVALNQKGIPVRGKKT KKEQKTAHFLPMAILKERIEENGYT
Endotoxin	< 0.2 EU/μg, determined by LAL method.
Purity	> 95% by SDS-PAGE and HPLC analyses.
Storage	Lyophilized recombinant human Keratinocyte Growth Factor (rhKGF) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rhKGF should be stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade.
Storage Buffer	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH2O at 100 μg/mL.

GENE INFORMATION

Gene Name	FGF7 fibroblast growth factor 7 [Homo sapiens]
Official Symbol	FGF7
Synonyms	FGF7; fibroblast growth factor 7; fibroblast growth factor 7 (keratinocyte growth factor); keratinocyte growth factor; KGF; FGF-7; heparin-binding growth factor 7; HBGF-7;

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Gene ID	2252
mRNA Refseq	NM_002009
Protein Refseq	NP_002000
MIM	148180
UniProt ID	P21781

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