

# Keratinocyte Growth Factor-1

Human, Recombinant (rHuKGF-1 )

Expressed in *E. coli*

Cat. No. CRP0882

Lot. No. (See product label)

## PRODUCT INFORMATION

**Description:** Keratinocyte Growth Factor-1 (KGF-1/FGF-7) is one of 23 known members of the FGF family. All FGFs have two conserved cysteine residues and share 30–50% sequence identity at the amino acid level. Proteins of this family play a central role during prenatal development and postnatal growth and regeneration of variety of tissues, by promoting cellular proliferation and differentiation. KGF-1/FG-7 is a mitogen factor specific for epithelial cells and keratinocytes and signals through FGFR 2b. KGF-1/FGF-7 plays a role in kidney and lung development, angiogenesis, and wound healing.

**Amino-Acid Sequence:** 164 aa, non-glycosylated

**M. W. :** Approximately 19.0 kDa

**Recombinant:** Expressed in *E. coli*

**Purity:** >96% by SDS-PAGE and HPLC analyses.

**Formulation:** Lyophilized from a 0.2mm filtered solution in 20mM PB, pH 8.0, 1M NaCl.

**Biological Activity:** The biological activity was determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing KGF receptors yielding an ED<sub>50</sub> <10ng/ml.

**Endotoxin:** Less than 1EU/mg of rHuKGF-1 as determined by LAL method.

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions.

**Storage:** This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

## FOR RESEARCH USE ONLY



[PDB](#) rendering based on 1qqk.

## GENE INFORMATION

**Gene Name:** [FGF7](#)

**Gene Synonyms:** KGF; HBGF-7; FGF-7; Fibroblast growth factor 7; keratinocyte growth factor; keratinocyte growth factor; Keratinocyte growth factor precursor; fibroblast growth factor 7 (keratinocyte growth factor)

**Gene Type:** protein coding

**mRNA Refseq:** [NM\\_002009](#)

**Protein Refseq:** [NP\\_002000](#)

**MIM:** [148180](#)

**GeneID:** [2252](#)

**Uniprot ID:** [P21781](#)

**Chromosome Location:** 15q15-q21.1

**Pathway:** MAPK signaling pathway. Melanoma. Prostate cancer. Regulation of actin cytoskeleton. Signaling by FGFR

**Function:** growth factor activity

## REFERENCES

1. Beer HD, Gassmann MG, Munz B, et al. Expression and function of keratinocyte growth factor and activin in skin morphogenesis and cutaneous wound repair. *J. Investig. Dermatol. Symp. Proc.* 2001;5 (1): 34–39.
2. Ware LB, Matthay MA. Keratinocyte and hepatocyte growth factors in the lung: roles in lung development, inflammation, and repair. *Am. J. Physiol. Lung Cell Mol. Physiol.* 2002; 282 (5): L924–940.
3. Finch PW, Rubin JS. Keratinocyte growth factor/fibroblast growth factor 7, a homeostatic factor with therapeutic potential for epithelial protection and repair. *Adv. Cancer Res.* 2004;91: 69–136.

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