

Recombinant Human Keratinocyte Growth Factor (rh KGF-1/ FGF-7)

Synonyms: HBGF-7

Introduction: 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. KGF-1 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: Recombinant human KGF-1 produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 164 amino acids and having a molecular mass of 19 kDa. The rh KGF-1 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2µm filtered solution in 20mM PB, pH 8. 0,5M NaCl
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh KGF-1 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh KGF-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution KGF-1 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 96.0% as determined by RP-HPLC and by SDS-PAGE.

Amino acid Sequence: MCNDMTPEQM ATNVNCSSPE RHTRSVDYME GGDIVRRLF CRTQWYLRI
KRGKVKGTQE MKNNYNIMEI RTVAVGIVAI KGVESEFYLA MNKEGKLYAK KECNEDCNFK ELILENHNT
YASAKWTHNG GEMFVALNQQ GIPVRGKTK KEQKTAHFLP MAIT.

Biological Activity: The biological activity was determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing KGF receptors yielding an ED₅₀ <10ng/ml, corresponding to a Specific Activity of 1.0×10⁵ IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11343652
<i>medium</i>	10 µg	Cat.N°	11343653
<i>large</i>	50 µg	Cat.N°	11343655
<i>x-large</i>	250 µg	Cat.N°	11343657

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