

Product Information

HumanKine™ Keratinocyte Growth Factor, human recombinant, expressed in HEK 293 cells

Catalog Number **H6666**

Storage Temperature -20°C

Synonyms: KGF, FGF-7

Product Description

HumanKine™ Keratinocyte Growth Factor (KGF) is expressed as glycosylated 17 and 30 kDa monomers in human 293 cells. Production in human 293 cells offers authentic glycosylation. Glycosylation contributes to stability in cell growth media and other applications.

Keratinocyte Growth Factor is a member of the fibroblast growth factor family.¹ KGF is an epithelial cell-specific mitogen responsible for the normal proliferation and differentiation of human epithelial cells.² KGF is secreted in culture by stromal fibroblasts derived from major epithelial organs including the skin and gastrointestinal tract; and is expressed *in vivo* by dermal, but not epidermal cells.² KGF transcripts are found in dermal fibroblasts, epidermal melanocytes, and malignant melanoma cells.³ KGF is particularly active as a mitogen for BALB/MK cells, a continuous mouse keratinocyte line,⁴ and as a potent mitogen, equivalent to EGF, for human keratinocytes in culture.²

This product is lyophilized from a solution containing 10 mM Tris-HCl, pH 7.4, with 700 mM NaCl.

ED₅₀: ≤ 80 ng/mL

The specific activity was determined by the dose-dependent stimulation of the proliferation of the monkey epithelial cell line 4MBR-5.

Purity: $\geq 90\%$ (SDS-PAGE)

Endotoxin level: ≤ 1 EU/ μg

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile water containing 0.1% endotoxin-free recombinant human serum albumin

Storage/Stability

Store the product at -20°C . The lyophilized product remains active for one year at -20°C .

Upon reconstitution, the cytokine can be stored at $2-8^{\circ}\text{C}$ for short term only, or at -20°C to -80°C in aliquots for long term. Avoid repeated freeze-thaw cycles.

References

1. Finch, P. et al., Science, **245**, 752 (1989).
2. Marchese, C. et al., J. of Cell. Phys., **144**, 326 (1990).
3. Albino, A. et al., Cancer Research, **51**, 4815 (1991).
4. Weissman, B. et al., Cell, **32**, 599 (1983).
5. Rubin, J.S. et al., J. Natl. Cancer Inst., 98, 812-824 (2006).

HumanKine is a trademark of HumanZyme Inc.

DF,GS,JF,MAM 06/12-1