


Human Keratinocyte Growth Supplement (HKGS)

Catalog Numbers S-001-5 and S-001-K

Pub. No. MAN00001605 Rev. 3.0

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from thermofisher.com/support.

Product description

Human Keratinocyte Growth Supplement (HKGS) is a sterile, concentrated (100X) solution intended for use as one component in a complete culture environment for the growth of normal human epidermal keratinocytes. HKGS is an ionically-balanced supplement containing bovine pituitary extract (BPE), Recombinant human insulin-like growth factor-I, hydrocortisone, bovine transferrin, and human epidermal growth factor. For investigators who wish to vary the concentration of one or more of these components in their cultures, the HKGS Kit contains separate aliquots of BPE, Recombinant human insulin-like growth factor-I, hydrocortisone, bovine transferrin, and human epidermal growth factor, as well as a vial of Gentamicin/ Amphotericin solution. Use of Gentamicin/Amphotericin is optional. Each HKGS Kit or 5 mL bottle of HKGS is the correct amount of supplement for a 500 mL bottle of EpiLife™ basal medium or basal Medium 154. When a 500 mL bottle of medium is supplemented with HKGS or the components of the HKGS kit, the final concentrations of the components in the supplemented medium are: BPE, 0.2% v/v; Recombinant human insulin-like growth factor-I, 0.01 µg/mL; hydrocortisone, 0.18 µg/mL; bovine transferrin, 5 mg/mL; and human epidermal growth factor, 0.2 ng/mL.

Contents and storage

Product	Cat. No.	Contents	Storage
Human Keratinocyte Growth Supplement	S-001-5	5 mL	<ul style="list-style-type: none"> Prior to shipping product is stored at -20°C and shipped on dry ice. Upon receipt, store at -20°C in a non-self-defrosting freezer. When stored at -20°C, the product is stable until the expiration date shown on the label. Note: After long-term storage at -20°C, HKGS may contain a small amount of precipitate. This precipitate is formed from cold-insoluble material in the BPE component of the HKGS and will not affect the performance of the product. A similar precipitate may be seen in the BPE component of the HKGS Kit.
	S-001-K	Kit	

Intended use

HKGS is intended for use in conjunction with the aforementioned basal media for the routine serum-free culture of normal human epidermal keratinocytes. The HKGS kit is designed for investigators who wish to vary the concentration of one or more of the components of HKGS in their cultures. Additional applications for both products may include primary isolation of keratinocytes from skin and clonal growth assays. For optimal results when performing primary isolations, HKGS should be used in conjunction with Coating Matrix Kit (Cat. No. R-011-K).

- Once thawed, do not leave the product at 37°C.
- For instructions on adding HKGS or the HKGS kit to the appropriate basal medium, refer to the instructions that accompany the basal medium.

References

The HKGS formulation is based on published supplementation of medium MCDB 151 and MCDB 152 with modifications.

- Peehl and Ham. 1980. *In Vitro* **16**: 526-40. 1980.
- Tsao, et al. 1982. *J. Cell Physiology*. **110**: 219-29.

Thawing

- For best practice, thaw the product at refrigerated temperatures of 2-8°C overnight. Avoid thawing the product at room temperature overnight.
- For rapid thawing, remove the hydrocortisone vial from the pouch and thaw the remaining components in a 37°C warm water bath until the product is thawed. Avoid exposing the hydrocortisone vial to elevated temperatures.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at www.thermofisher.com/us/en/home/global/terms-and-conditions.html. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.



Life Technologies Corporation | 3175 Staley Road | Grand Island, NY 14072

For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

The information in this guide is subject to change without notice.

DISCLAIMER: TO THE EXTENT ALLOWED BY LAW, THERMO FISHER SCIENTIFIC INC. AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

Important Licensing Information: These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2020 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.