

# Human Keratinocyte Growth Supplement (HKGS)

Catalog Numbers S0015, S001K

Pub. No. MAN0001605 Rev. D



**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](https://www.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 µg/mL; and human epidermal growth factor, 0.2 ng/mL.

## Contents and storage

Product	Cat. No.	Contents	Storage <sup>[1]</sup>
Human Keratinocyte Growth Supplement	S0015	5 mL	Store at -20°C in a non-self-defrosting freezer. <sup>[2]</sup>
	S001K	Kit	

<sup>[1]</sup> Prior to shipping product is stored at -20°C and shipped on dry ice.

<sup>[2]</sup> 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.

## Product use

HKGS is used 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 Type I human collagen.

## 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.
- 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.

# Limited product warranty

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Revision history: Pub. No. MAN0001605 D

Revision	Date	Description
D	6 May 2025	In Product description, the bovine transferrin concentration was corrected to 5 µg/mL. Changed topic title from Intended use to Product use. In Product use topic, Coating Matrix Kit was changed to Type I human collagen. The version numbering was changed from a numerical format to a letter-based format in accordance with internal document control procedures.
3.0	15 January 2020	Baseline for this revision. Updated thawing conditions and changed bovine serum to recombinant human insulin-like growth factor-I.

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

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