



HKSdaFREE™ KIT

A 2-Component, Chemically-Defined Animal Origin-Free (cdAOF) Supplement System, for the Primary Isolation and Serial Propagation of Human Keratinocytes, Corneal Epithelial Cells, Oral Epithelial Cells and Other Epithelial Cells. Enables cdAOF Manual or 3D Bioprinted Reconstruction of Human Epidermis and Corneal Epithelium.

DESCRIPTION AND CONTENTS

- AvantBio Products: HKSdaFREE (product no. AVBP-004) and HKGE (product no. AVBP-005)
- HKSdaFREE 5 ml Volume, 100X concentrated dAOF supplement. Sterilized by filtration.
- HKGE 0.5 ml Volume, 1000X concentrated dAOF Supplement. Sterilized by filtration.
- Shipped and stored frozen at -20° C or lower.
- Shelf life: 18 months from date of manufacture (DOM), when stored at -20° C or lower.
- For laboratory usage only. Not to be used for therapeutic or diagnostic purposes in humans or animals. Use good laboratory practices when handling. Avoid contact and do not ingest. Consult SDS.

DIRECTIONS FOR USE IN EPI LIFE® (THERMOFISHER® - CASCADE BIOLOGICS®) BASAL MEDIUM

1. To efficiently support the propagation of human keratinocytes as well as other epithelial cell primary and post-primary cell cultures in the dAOF environment, AvantBio recommends that both HKSdaFREE and HKGE be used to supplement **EpiLife® basal cell culture medium** (sold by ThermoFisher Scientific, cat. no. MEPI500CA).
2. Thaw supplements at room temperature. Use immediately, or store for up to 6 hours at 4° C before use. Do not leave thawed product at room temperature or higher for longer than 5 minutes. Do not re-freeze. Wipe vial clean with 70% isopropyl alcohol before use. HKSdaFREE and HKGE quantities (volumes) are intended to supplement 500 mls of EpiLife® basal medium. Use entire contents of each vial (i.e. rinse vial 1 x with basal medium).
3. Pre-coating the cell culture surface (substratum) with animal origin free recombinant human collagen-1 (at 5 ug/cm²), or other animal / human-sourced collagen-1 (e.g. human or bovine), can enhance cell survival, cell proliferation and cell replicative lifespan. For primary epithelial cell culture, pre-coating the cell culture surface with collagen-1 **is required**. For post-primary epithelial cell culture (serial propagation), pre-coating the cell culture surface with collagen-1 **is optional**. Purified animal/human-derived collagen-1 can be purchased from a variety of vendor sources. Animal/human origin-free recombinant human collagen-1 can be purchased by request from Collplant Inc. (see: <https://collplant.com/> and <https://collplant.com/contact/>). Animal origin-free TrypLE™ Select 1X (ThermoFisher Scientific: cat. no. 12563029) is recommended for cell dissociation during post-primary serial propagation (passage) and cryopreservation for cell banking.



AVANTBIO LIMITED USE AGREEMENT

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