

# DermaLife® K Serum-Free Keratinocyte Culture Medium and DermaLife Calcium-Free Basal Medium Specification Sheet



#### **DermaLife K Cell Culture Medium**

DermaLife K is a serum-free medium optimized for the culture of Human Keratinocytes. DermaLife K supports the growth of these cells over a period of at least 15 population doublings.

DermaLife Basal Medium contains no antimicrobials and no phenol red. Lifeline offers antimicrobials and phenol red; however, they are not required for eukaryotic cell proliferation. **DermaLife Basal Medium is also offered in a calcium-free version** (LM-0008).

# **DermaLife K Cell Culture Medium Components**

DermaLife K is offered in a kit format composed of basal medium and associated supplements and growth factors called "LifeFactors<sup>®</sup>." This kit allows you to prepare fresh medium in your laboratory, extending shelf life and enhancing performance. DermaLife Basal Medium is provided in a light-protected 500 mL bottle. The remaining LifeFactors (growth factors and supplements) are packaged in a convenient gas-impermeable pouch for easy storage.

#### DermaLife Calcium-Free Basal Medium

DermaLife Calcium-Free Basal Medium contains no calcium and will not support cell attachment and growth. Recommended range of final calcium concentration is 0.02 mM to 0.15 mM, dependent upon cell type.

Product	Part No.	Volume	Final Concentrations in Supplemented Medium	Storage
DermaLife K Medium Complete Kit,				2-8°C
(DermaLife Basal Medium,	<u>LL-0007</u>			when
DermaLife K LifeFactors Kit)				prepared
DermaLife Basal Medium	<u>LM-0004</u>	485 mL		2-8°C
DermaLife K LifeFactors Kit	<u>LS-1030</u>			-20°C
rh Insulin LifeFactor	<u>LS-1004</u>	0.5 mL	5 μg/mL	-20°C
L-Glutamine LifeFactor	<u>LS-1031</u>	15 mL	6 mM	-20°C
Epinephrine LifeFactor	LS-1032	0.5 mL	1 μM	-20°C
Apo-Transferrin LifeFactor	<u>LS-1033</u>	0.5 mL	5 μg/mL	-20°C
rh TGF- $\alpha$ LifeFactor	<u>LS-1034</u>	0.5 mL	0.5 ng/mL	-20°C
Extract P™ LifeFactor	<u>LS-1037</u>	2 mL	0.4%	-20°C
Hydrocortisone Hemisuccinate LifeFactor	<u>LS-1039</u>	0.5 mL	100 ng/mL	-20°C
DermaLife K Calcium-Free Medium Complete Kit,				2-8°C
(DermaLife Calcium-Free Basal Medium,	<u>LL-0029</u>			when
DermaLife K LifeFactors Kit)				prepared
DermaLife Calcium-Free Basal Medium	<u>LM-0008</u>	485 mL		-20°C
DermaLife K LifeFactors Kit	<u>LS-1030</u>			-20°C
Calcium Chloride LifeFactor	<u>LS-1087</u>	0.5 mL	Add 214 μL of LS-1087 to achieve 0.06 mM CaCl <sub>2</sub>	-20°C to RT
Antimicrobial Supplement: Gentamicin and Amphotericin B (Provided with purchase of LL-0007 or LL-0029)	<u>LS-1104</u>	0.5 mL	Gentamicin 30 µg/mL Amphotericin B 15 ng/mL	-20°C
Optional Supplements	Part No.	Volume	Concentrations of Supplement	Storage
Phenol Red Supplement	<u>LS-1009</u>	1 mL	33 mM	RT

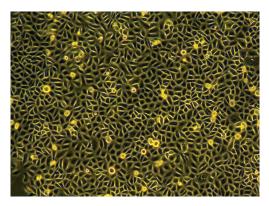
To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

# **Quality Testing for Guaranteed Consistency and Reproducible Results**

Lifeline Cell Technology manufactures products using the highest guality raw materials and incorporates ISO style quality assurance in every production run. Exacting standards and production procedures ensure lot-to-lot consistency. Every production lot of DermaLife® K Medium is extensively tested using normal human keratinocytes. DermaLife K, Medium, DermaLife K Calcium-Free Medium, and Gentamicin-Amphotericin B (LS-1104) are cell culture tested separately.

- Negative for bacteria and fungal growth Sterility Testing
- 315 +/- 10 mOsm • Osmolality

- pH
- 7.5 +/- 0.2
- Cell Testing Rate of proliferation and morphology
- Endotoxin < 0.5 EU/mL



DermaLife K Serum-Free Medium grows human epidermal keratinocytes and oral keratinocytes through at least 15 population doublings at rates that meet or exceed other commercially available serum-free media while maintaining excellent cell morphology. In comparisons with other commercially available media, DermaLife K shows superior proliferation of epidermal keratinocytes at different seeding densities.

Shown left: Human Epidermal Keratinocytes, passage 2, 5 days after inoculation with 2,500 cells/cm<sup>2</sup> (100X).

Shown below: Human Epidermal Keratinocytes inoculated at low seeding densities in 24-well plates. Higher fluorescence represents a greater number of cells per well and therefore better proliferation.

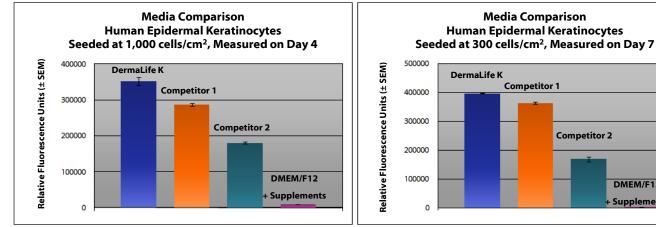
**Media Comparison** 

**Competitor 1** 

Competitor 2

DMEM/F12

Supplements



## **The Lifeline® Guarantee**

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. Upon request, Lifeline will provide lot-specific QC test results, material safety data sheets and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.

## **Innovative Packaging Features**

Lifeline has made significant improvements to traditional medium packaging.

- The specially designed shrink label works as a light barrier to help protect medium from light damage.
- A barrier sleeve helps protect the medium from contaminants found in the water bath.
- Lifeline is an environmentally friendly company. Our cell culture media bottles are recyclable and we ship all products with biodegradable packing material.

## **Safety Statement**

This product is for Research Use Only. This product is not approved for human or veterinary use, or for use in *in vitro* diagnostics or clinical procedures.

# Call Lifeline Technical Service and Sales at 877.845.7787

or visit lifelinecelltech.com for more information

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