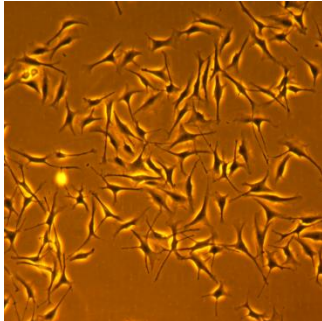


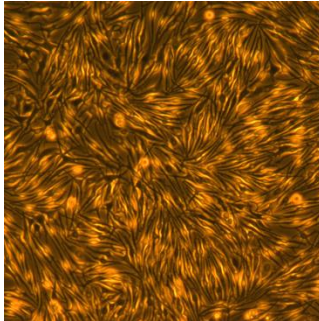
Normal Human Epidermal Melanocytes Specification Sheet

Normal Human Epidermal Melanocytes-Neonatal (HEMn)

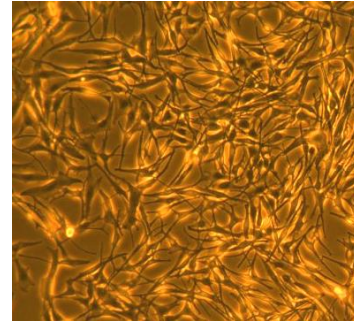
Normal Human Epidermal Melanocytes-Adult (HEMA)



HEMn, passage 4, 3 days
after inoculation with
2,500 cells/cm² (100X)



HEMn, passage 4, 6 days
after inoculation with
5,000 cells/cm² (100X)



HEMA, passage 3, 10 days
after inoculation with
5,000 cells/cm² (100X)

CELL FEATURES:

- HEM are cryopreserved after primary culture or secondary culture*.
- HEM provide an ideal model for testing of compounds, and in the study of cancer or dermal biology.
- Culture HEM without PMA or Cholera toxin or other artificial non-specific stimulants.
- HEM are extensively tested for quality and optimal performance.
- Lifeline guarantees performance and quality.

NORMAL HUMAN EPIDERMAL MELANOCYTES ARE TESTED FOR:

• Cell Count	500,000 cryopreserved cells per vial (HEMn and HEMA), or 1,000,000 cryopreserved cells per vial (HEMn-HP and HEMA-HP)
• Low Serum Proliferation	Population growth at various densities
• Morphology	Normal cell appearance for 15 population doublings (HEMn and HEMn-HP), or 10 population doublings (HEMA and HEMA-HP)
• Cell Viability	Minimum 70% viability when thawed from cryopreservation
• Sterility Testing	Negative for mycoplasma, bacterial or fungal growth for 14 days
• Virus Testing	Negative for HIV, HBV, and HCV by PCR
• Specific Testing	L- Dopa Oxidase Activity Assay

PART NUMBER	DESCRIPTION
FC-0019	HEMn, Normal Human Epidermal Melanocytes, Neonatal, Secondary - 500,000 cells per vial
FC-0023	HEMn, Normal Human Epidermal Melanocytes, Neonatal, Primary - 500,000 cells per vial
FC-0089	HEMn-HP, Normal Human Epidermal Melanocytes, Neonatal, Highly Pigmented, Secondary – 1,000,000 cells per vial
LL-0027	DermaLife® M Medium Complete Kit (DermaLife Basal Medium, DermaLife M LifeFactors® Kit)
LS-1104	GA Antimicrobial Supplement, 0.5 mL (Gentamicin 30 mg/mL, Amphotericin B 15 µg/mL); provided with purchase of LL-0027
FC-0030	HEMA, Normal Human Epidermal Melanocytes, Adult, Secondary - 500,000 cells per vial
FC-0090	HEMA-HP, Normal Human Epidermal Melanocytes, Adult, Highly Pigmented, Secondary – 1,000,000 cells per vial
LL-0039	DermaLife Ma Medium Complete Kit (DermaLife Basal Medium, DermaLife Ma LifeFactors Kit)
LS-1104	GA Antimicrobial Supplement, 0.5 mL (Gentamicin 30 mg/mL, Amphotericin B 15 µg/mL); provided with purchase of LL-0039

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

Lifeline's Normal Human Epidermal Melanocytes

Lifeline's Normal Human Epidermal Melanocytes (HEM), when grown in Lifeline's DermaLife® M or DermaLife Ma Medium, provide an ideal low serum culture model, without PMA or Cholera toxin, for the accurate testing of compounds and for use in the study of cancer or dermal biology.

Lifeline's HEM are cryopreserved as primary or secondary cells* to ensure the highest viability and plating efficiency. Our HEMn and HEMn-HP are quality tested in DermaLife M Medium to ensure proper growth and morphology over a period of at least 15 population doublings. Our HEMa and HEMa-HP are quality tested in DermaLife Ma Medium to ensure proper growth and morphology over a period of at least 10 population doublings.

Lifeline's HEM are not exposed to antimicrobials or phenol red when cultured in the respective Lifeline® medium. Lifeline offers antimicrobials and phenol red; however they are not required for eukaryotic cell proliferation. A vial of Gentamicin and Amphotericin B (GA; LS-1104) is provided with the purchase of DermaLife M (LL-0027) or DermaLife Ma (LL-0039) Medium Complete Kits for your convenience. The use of GA is recommended to inhibit potential fungal or bacterial contamination of eukaryotic cell cultures. Phenol Red (LS-1009) may be purchased, but is not required.

Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates extensive quality assurance in every production run. Exacting standards and production procedures ensure consistent performance.

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.

All donated tissues have been obtained under proper informed consent and adheres to the Declaration of Helsinki, The Human Tissue Act (UK), CFR Title 21, and HIPAA Regulations relative to obtaining and handling human tissue for Research Use.

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.

Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any liquid nitrogen from cryopreserved vials by carefully loosening the vial cap in a biosafety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for up to 24 hours prior to being thawed.

**Lifeline Technical Note: There are different and often contradictory terminologies used by cell culture companies to define the passage number of cells. Lifeline's designation of 'primary cells' are cells that have been isolated from tissue, plated onto culture vessels, expanded, harvested and cryopreserved. The term 'secondary' indicates that the cells have been isolated, plated and expanded in culture vessels twice before being harvested for cryopreservation.*

Call Lifeline Technical Service and Sales at 877.845.7787
or visit lifelinecelltech.com for more information

Lifeline Cell Technology – 8415 Progress Drive, Suite T – Frederick, MD 21701

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