

Lifeline Cell Technology Certificate of Analysis

Product Name: Human Epidermal Melanocytes, Neonatal-HP
Catalog Number: FC-0089
Product Description: Human epidermal melanocytes derived from highly pigmented neonatal skin. Neonatal melanocytes are cryopreserved in P2, after isolation from tissue cells are cultured for two passages and then cryopreserved. Vials contain 1,000,000 cells in one ml cryopreservation solution.
Product Lot Number: 05625
Manufacture Date: SEP2016
Expiration Date: Not applicable when stored at or below -150° C

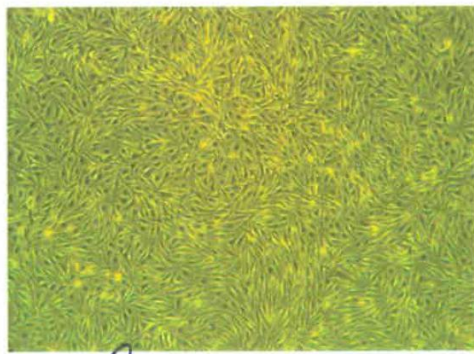
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| Product Information |
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Donor Demographics: Sex: Male Tissue Source: Foreskin Age: Neonatal
 Race: African American
 Recommended Culture Medium: DermaLife[®], LM-0004 supplemented with:
 DermaLife M LifeFactors[®] Kit, LS-1041

Recommended Inoculation: This lot of melanocytes was derived from a highly pigmented neonatal donor. Inoculation of 10,000 cells/cm² is recommended when cryopreserved cells are first thawed. Expect very poor plating of melanocytes after thaw. Initial passage may take three weeks before subculture. Subsequent passages can be inoculated with 2,500 cells/cm² and can be expected to be subcultured within 10-14 days.

| Test | Specifications | Results |
|--|---------------------|--------------------|
| Sterility Test (bacteria, yeast and fungi) | negative | negative |
| Sterility Test, mycoplasma | negative | negative |
| PCR virus testing: | | |
| Hepatitis B | negative | negative |
| Hepatitis C | negative | negative |
| HIV-1 and HIV-2 | negative | negative |
| Viable Cell Count: | ≥1,000,000 cells/ml | 1,187,500 cells/ml |
| Viability (by Trypan Blue Exclusion): | >70% viable | 84.4% viable |
| Cell Growth in DermaLife M | | |
| Population Doubling capacity | >15 doublings | 17.49 doublings |
| Cell morphology | normal | normal |
| Characterization: | | |
| Mel-5 immunostaining | positive | positive |
| L-Dopa oxidase activity | positive | positive |

Picture of P₃ neonatal Melanocytes-HP lot# 05625 cultured in DermaLife M growth medium, day 18 in culture from an inoculation of 10,000 cells/cm².



Quality Control Jeremy Hammond April 2, 2019

Jeremy Hammond, QC Director, Lifeline Cell Technology

To place an order call Lifeline technical and customer service at (877) 845-7787 or you may submit an order form by fax to (443) 393-0393. Order form available on line at www.lifelinecelltech.com/order.