



## Human Dermal Microvascular Endothelial Cells-Neonatal (HDMVECn) Specification Sheet

Lifeline’s Normal Human Dermal Microvascular Endothelial Cells (HDMVECn), when grown in Lifeline’s VascuLife® Medium, provide an ideal culture model, with or without human VEGF, for the study of angiogenesis, atherosclerosis, or vascular biology.

Lifeline’s HDMVECn are isolated and quality tested in VascuLife EnGS-Mv Medium to ensure optimal growth over a period of at least 15 population doublings while remaining naïve to VEGF. Lifeline’s HDMVECn need not be exposed to antimicrobials or phenol red when cultured in VascuLife medium; an advantage since these supplements can cause cell stress and “masking effects” that may negatively impact experimental results. Lifeline offers these traditional supplements; however they are not needed, or recommended, to achieve optimal cell performance in most research applications.

CELL FEATURES:	
•	HDMVECn are cryopreserved after less than 4 weeks in culture.
•	HDMVECn need not be exposed to phenol red or antimicrobials when cultured in VascuLife medium.
•	Culture HDMVECn with or without VEGF.
•	HDMVECn are extensively tested for quality and optimal performance.
•	Lifeline guarantees performance and quality.

### 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.

HUMAN DERMAL MICROVASCULAR ENDOTHELIAL CELLS ARE TESTED FOR:	
• Cell Count	500,000 cryopreserved cells per vial
• Cell Viability	Minimum 70% viability when thawed from cryopreservation
• Sterility Testing	Negative for mycoplasma Negative for bacterial and fungal growth
• Virus Testing	Negative for HIV-1, HIV-2, HBV, and HCV by PCR
• Specific Staining	von Willebrand Factor

*\*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.*

To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call technical and customer service at 877.845.7787.

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### The Lifeline® Guarantee

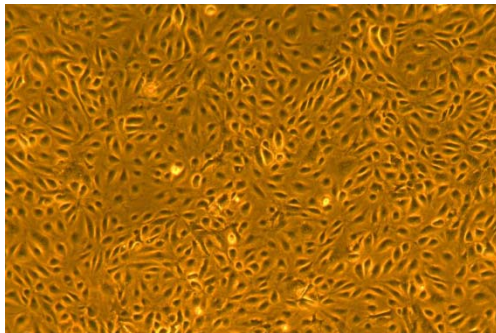
Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. All donated tissues have been obtained under proper informed consent. If Lifeline's products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. 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](http://lifelinecelltech.com) or contact your Lifeline representative for more information.

### 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* diagnostic 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 nitrogen from cryopreserved vials 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.

PRODUCT INFORMATION:	
Part #	Description
<a href="#">FC-0042</a>	HDMVECn, Human Dermal Microvascular Endothelial Cells, Neonatal – 500,000 per vial
<a href="#">LL-0004</a>	VascuLife® EnGS-Mv Medium Complete Kit (VascuLife Basal Medium, VascuLife EnGS-Mv LifeFactors® Kit)
<a href="#">LL-0005</a>	VascuLife® VEGF-Mv Medium Complete Kit (VascuLife Basal Medium, VascuLife VEGF-Mv LifeFactors® Kit)



HDMVECn cultured in VascuLife EnGS-Mv, passage 4, 5 days after inoculation with 5,000 cells/cm<sup>2</sup> (100X).

**Call Lifeline Technical Service and Sales at [877.845.7787](tel:877.845.7787)**  
or visit [lifelinecelltech.com](http://lifelinecelltech.com) for more information

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