

## VascuLife® EnGS Endothelial Cell Culture Medium Specification Sheet



### VascuLife EnGS Cell Culture Medium

VascuLife EnGS (containing Endothelial Cell Growth Supplement) is a new low serum medium optimized for the culture of human endothelial cells including Human Umbilical Vein Endothelial Cells (HUVEC), aortic endothelial cells and other human large-vessel endothelial cells. VascuLife supports the growth of these cells in a low serum environment without human VEGF. VascuLife contains no antimicrobials and no phenol red since these components can cause cell stress and “masking effects” that may influence experimental results. Lifeline® offers these traditional supplements; however they are not needed, or recommended, to achieve optimal cell performance.

### VascuLife Cell Culture Medium Components

VascuLife is offered in a kit format composed of basal medium and associated supplements and growth factors called “LifeFactors®.” This kit allows you to

prepare fresh medium in your laboratory, extending shelf life and enhancing performance. VascuLife 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.

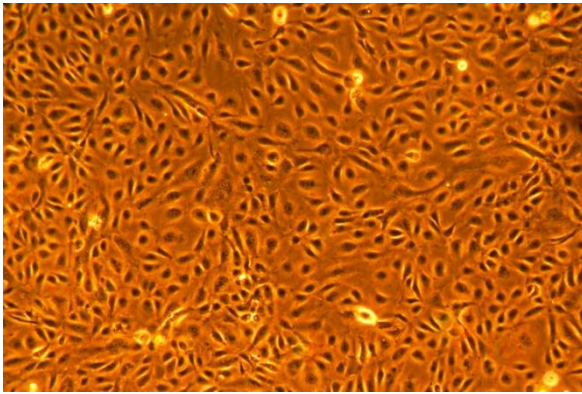
Product	Part No.	Volume To Add	Final Concentrations in Supplemented Medium	Storage
<b>VascuLife EnGS Medium Complete Kit, (VascuLife Basal Medium – 475 mL, VascuLifeEnGS LifeFactors Kit)</b>	<a href="#">LL-0002</a>			2-8°C when prepared
<b>VascuLife Basal Medium</b>	<a href="#">LM-0002</a>	475 mL		2-8°C
<b>VascuLife EnGS LifeFactors Kit</b>	<a href="#">LS-1019</a>			-20°C
EnGS LifeFactor	<a href="#">LS-1018</a>	1.0 mL	0.2%	-20°C
rh EGF LifeFactor	<a href="#">LS-1015</a>	0.5 mL	5 ng/mL	-20°C
Ascorbic Acid LifeFactor	<a href="#">LS-1005</a>	0.5 mL	50 µg/mL	-20°C
L-Glutamine LifeFactor	<a href="#">LS-1013</a>	25 mL	10 mM	-20°C
Hydrocortisone Hemisuccinate LifeFactor	<a href="#">LS-1007</a>	0.5 mL	1.0 µg/mL	-20°C
Heparin Sulfate LifeFactor	<a href="#">LS-1017</a>	0.5 mL	0.75 U/mL	-20°C
FBS LifeFactor	<a href="#">LS-1012</a>	10 mL	2%	-20°C
Optional Supplements	Part No.	Volume	Concentrations of Supplement	Storage
Phenol Red Supplement	<a href="#">LS-1009</a>	1.0 mL	33 mM	RT
Antimicrobial Supplement: Penicillin, Streptomycin and Amphotericin B	<a href="#">LS-1011</a>	1.0 mL	Penicillin 10,000 Units/mL Streptomycin 10,000 µg/mL Amphotericin B 25 µg/mL	-20°C

### Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality 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 VascuLife EnGS Medium is extensively tested using endothelial cells.

- Sterility Testing Negative for bacterial and fungal growth
- pH 7.8 +/- 0.3
- Cell Testing Rate of proliferation and morphology
- Osmolality 270 +/- 10 mOsm
- Endotoxin < 0.5 EU/mL

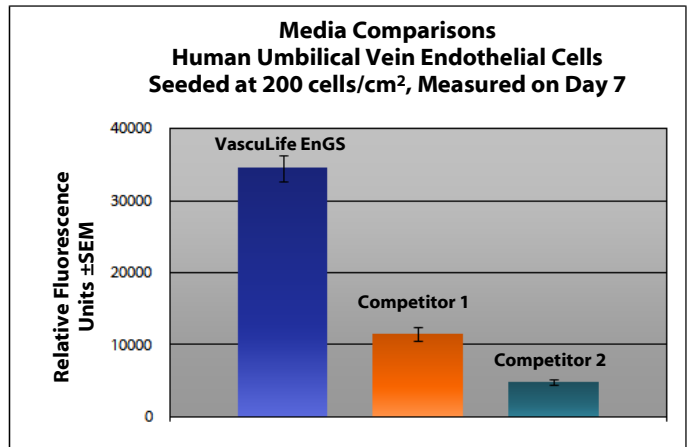
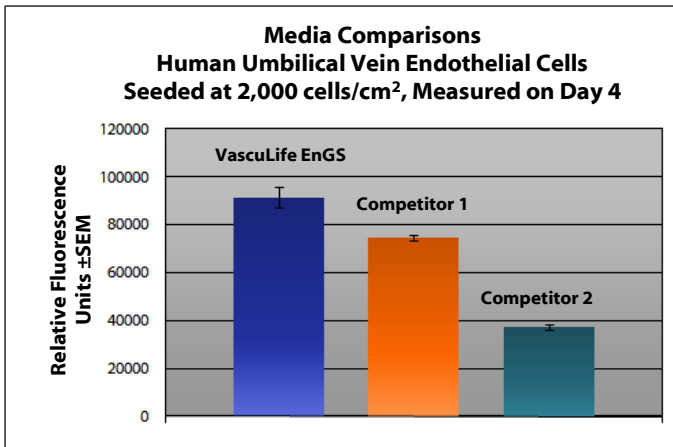
To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call technical and customer service at 877.845.7787.



VascuLife® EnGS Medium grows HUVEC and other human large-vessel endothelial cells, without the addition of human VEGF at rates that meet or exceed other commercially available serum-containing media while maintaining excellent cell morphology. In comparisons with other commercially available media, VascuLife shows superior proliferation at different seeding densities.

Shown at left: HUVEC, passage 2, 4 days after inoculation with 2,000 cells/cm<sup>2</sup> (100X)

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



### The Lifeline® Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. 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.

### 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](http://lifelinecelltech.com) for more information

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