

## Human Umbilical Vein Endothelial Cells

Catalog Number	ALHE01
Product Name	Human Umbilical Vein Endothelial Cells (HUVECs)
Storage	Liquid Nitrogen
Product Format	Frozen vial
Cells Number	0.5 million

**\*Caution:** The handling of human derived products has the potential to be biologically hazardous. All Cell strains tested negative for HIV, HBV, and HCV DNA in diagnostic tests. Proper precautions must be taken to avoid exposure. Always wear proper protective equipment (Gloves, safety glasses, etc.) when handling these materials. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination.

### **GENERAL INFORMATION**

Human Umbilical Vein Endothelial Cells were isolated from normal human Umbilical tissue. Passage 1 cells are shipped in cryopreserved vial. ENDO-Growth medium(EGM-2102) containing 5% serum and growth supplements is recommended for culture. Cells have an average population doubling level >20 when cultured following the protocol below.

### **CELL CHARACTERIZATION**

Cytoplasmic VWF/ factor VIII	>95% positive by immunofluorescence
Cytoplasmic uptake of Di-I-Ac-LDL	>95% positive by immunofluorescence
Cytoplasmic PECAM1	>95% positive by immunofluorescence
Human Umbilical Vein Endothelial Cells are negative for	HIV-1, HBV, HCV, and mycoplasma

### **PRODUCT USE AND SHIPPING STATUS**

Product Use	Human Umbilical Vein Endothelial Cells are for research use only
Shipping Status	Frozen vial

## Frozen Vial:

- 1) Coating T25 flasks. Add 2 ml AlphaBioCoat (Cat.#AC001) into a T25 flask and ensure entire interior surface is coated with solution. After 30 minutes, dispose of AlphaBioCoat by aspiration. Gently rinse and aspirate flask with Phosphate Buffer Solution (Cat.#1XPBS-001). The flask is now ready for use (no need for overnight incubation when coated with Cat.#AC001).
- 2) If you are using the coated flask the same day, add about 4 ml of Endo-Growth media (Cat.#EGM-2102) to the coated flask. If the media changes color from pink to yellow, aspirate and discard the media. Add 4ml of fresh media to the coated flask.
- 3) Thaw the vial of cells in a 37°C water bath. Once you see a small amount of ice left in the vial, spray the vial with 70% Ethanol and wipe it down.
- 4) Transfer the vial into your Biosafety cabinet.
- 5) Using a 2 or 5ml pipet, pipet the cells out of the vial.
- 6) Transfer your cell suspension in to your coated plate that have the 4 ml media in it.
- 7) You should have a total working volume of 5ml of cell suspension in the flask; close the cap. Make sure cells are evenly distributed in the flask by moving the flask left and right five times. Move it up and down for an additional five times.
- 8) Place flask in a 37°C incubator with 5% CO<sub>2</sub>. If flask is not vented, please loosen cap.
- 9) Change media after 48 hours.
- 10) For assay or to induce quiescent cell, Use our Endothelial Basal Medium Cat.#EDBM-2101.
- 11) End of protocol