NEUROMICS

Human Umbilical Vein Endothelial Cells (HUVECs)

Catalog #: HEC01

Cell #: > 90% confluent at (>5x10^5 cells) in T25 flask

Storage: 37°C CO_2 incubator

Product Format: Proliferating culture

General Information

HUVECs were isolated from normal human umbilical vein. Passage 1, cells are ship in proliferating culture with a confluency of >90 %. ENDO-Growth Medium containing 5% serum and growth supplements are recommended for culture. Cells have an average additional population doubling levels >20 when cultured.

Characterization of the cells

- 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

HUVECs are negative for HIV-1, HBV, HCV, and mycoplasma.

Recommended Products

- ENDO-Growth Media – MED001
  - Contains 475 ml of ENDO-Basal Media and 25 ml of ENDO-Growth Supplement combined. Which is freshly prepared for your convenience

OR

- ENDO-Growth Kit – EGK001
  - Contains 475 of ENDO-Basal Media and 25 ml of ENDO-Growth Supplement in separately to be mixed to make growth media

- Smooth Coat Solution – SC300
  - Biocompatible complex of extracellular matrix binding solution

OR

- AlphaBioCoat Solution – AC001
  - Premium Smooth Coat Solution. Biocompatible complex of extracellular matrix binding solution with growth factors. Ideal for culturing cells from frozen.

- Cell Detachment Solution – ADF001
  - Contains protease and collagenase activities in an isotonic, phosphate buffer solution with EDTA to detach primary cells and cell lines
- 1X Phosphate Buffer Solution - PBS300

Shipping

Proliferating culture in T25 flask.

Handling of Arriving Cells

When you receive the cells, leave the flask in 37°C CO_2 incubator for 1 hour first, and then replace the transport medium with fresh Full medium. Let the cells grow for 24 hours before subculture.

www.neuromics.com

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail pshuster@neuromics.com

Note: Handling human derived products is potentially biohazardous. Although each cell strain tests negative for HIV, HBV and HCV DNA, diagnostic tests are not necessarily 100% accurate, therefore, proper precautions must be taken to avoid inadvertent exposure. Always wear gloves and safety glasses when working these materials. Never mouth pipette. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination.

SUBCULTURE PROTOCOL

1. Coating T25 flasks:
    a. Add 2 ml AlphaBioCoat Solution (AC001) into a T25 flask and ensure entire interior surface is coated with solution. After 30 minutes, dispose of Smooth Coat Solution by aspiration. Gently rinse and aspirate flask with phosphate buffer solution (PBS300). The flask is now ready for use(no need for overnight incubation when coated with AC001)
    b. If you are using the coated flask the same day, add about 4 ml of Endo-Growth media (MED001) 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.

2. Inspect to the confluence of the flask. If the flask is not 90% confluence, remove transport media and add 5ml of fresh media to the flask. Place flask in 37°C incubator until cells are at 90% confluence. Change media every 2 days.

3. If flask is at 90% confluence, aspirate transport media from flask

4. Rinse T25 flask containing cells with 5 ml 1XPBS (PBS300).

5. Gently aspirate out the PBS after rinsing, and discard.

6. Add 2ml of RT trypsin/ EDTA or Cell Detachement Solution (ADF001) to T25 flask containing cells (ensure entire interior surface is cover).

7. Place T25 flask containing cells into 37°C incubator for 1 or 2 minutes (cells will normally come off of the surface within 1 or 2 minutes).

8. Suspend the cells with 15ml of ENDO-Growth medium (MED001) and transfer equally into 3 pre-coated T25 flasks (the cells are now at a subculture ratio of 1:3).

9. There is no need to spin cells during subculture.

10. Proliferating cell culture: ENDO-Growth medium (MED001) should be changed every 2 days. The cells normally become confluent within 7 days (when split at a 1:3 ratio)

11. Use ENDO- Basal media (MED002) containing 0.5% FBS to induce quiescent cells (after 18-24 hours)

www.neuromics.com

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail pshuster@neuromics.com