



CELL APPLICATIONS, INC.

Published on *Cell Applications* (<https://www.cellapplications.com>)

[Home](#) > Human Pulmonary Artery Endothelial Cells: HPAEC

Human Pulmonary Artery Endothelial Cells: HPAEC

- Description
- Details
- Products
- Resources
- Citations **NEW**

MSDS Cryopreserved Cells

Instructions HPAEC

5 Important Cell Culture Rules

Cell Apps Flyer Airway Cells

Cell Apps Flyer Cardiovascular Cells

Cell Apps Flyer Endothelial Cells

Cell Apps Poster Primary Cells

Description

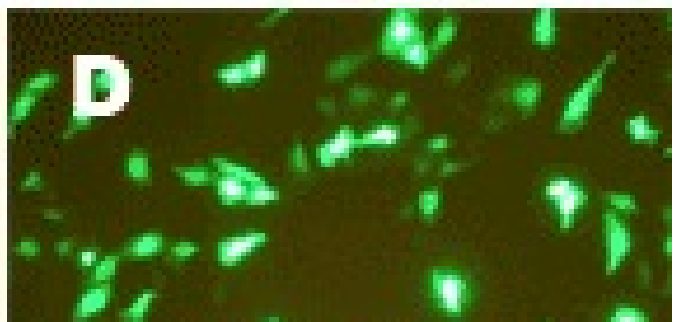
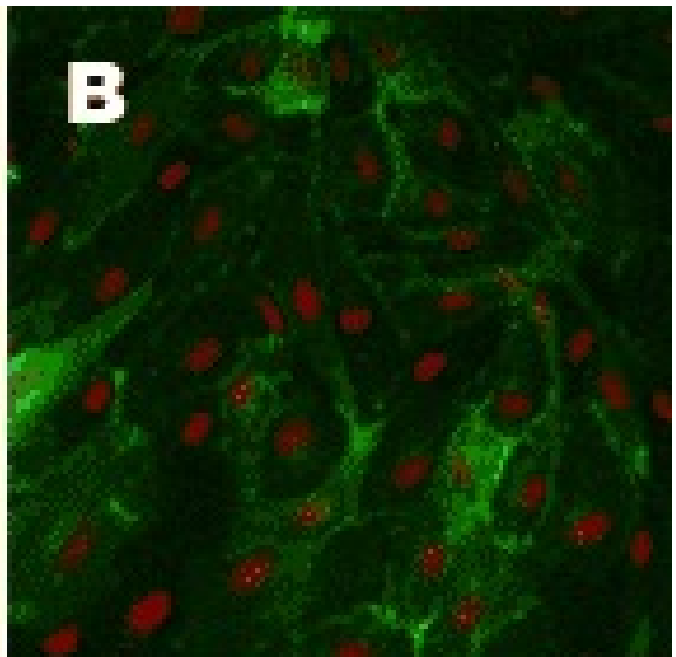
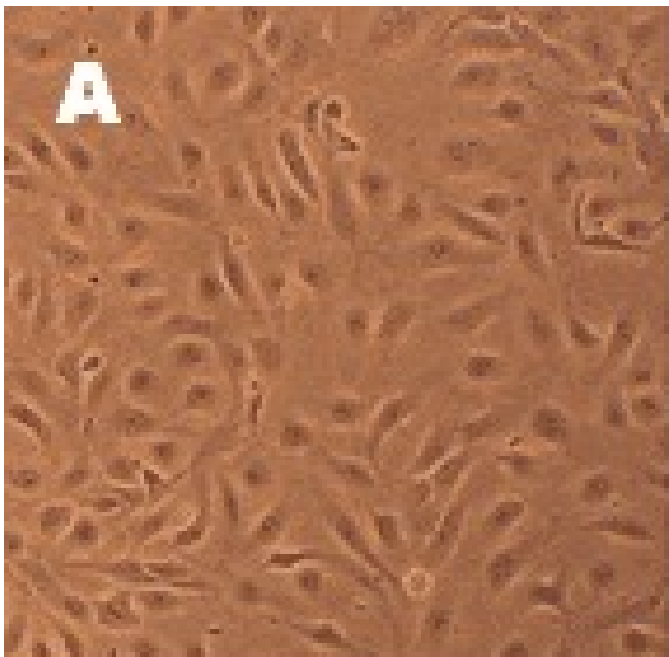
Human Pulmonary Artery Endothelial Cells (HPAEC) provide an excellent model system to study many aspects of cardiovascular function and disease, including diabetes-associated complications, mechanisms of endothelial dysfunction caused by environment, oxidative stress, hypoxia and inflammation, as well as mode of action of various natural compounds and drug candidates.

Note that several publications describe the differences between endothelial cells from different vascular beds and between macro- and micro-vascular cells from the same organ, highlighting the importance of confirming any new findings on cell lots obtained from several different origins. Cell Applications, Inc. offers the widest variety of endothelial cells, and is well equipped to meet this need.

HPAEC from Cell Applications have been used to investigate or demonstrate

- Vasculoprotective effects of propofol, demonstrating its potential for treating pulmonary arterial hypertension
- Hits from a high-throughput screening assay and discover anziaic acid inhibits bacterial activity
- Endothelin-1 is released by endothelial cells during acute crisis in sickle cell anemia, increases vascular constriction
- Pollutant particles cause vascular dysfunction by up-regulating clotting-related genes

- Central role of AMP-activated protein kinase in normal endothelial barrier function can be disrupted, causing endothelial hyperpermeability and lung injury
- Anti-inflammatory and cardioprotective effects of resveratrol
- cGMP prevents oxidant-induced damage to the endothelial barrier function
- Radiation causes endothelial cell senescence due to up-regulation of proliferative signaling in the presence of cell cycle arrest
- Vanadium exposure causes pulmonary vasoconstriction mediated in part by the inhibition of endothelial NO production
- Cytotoxic effects of a novel pore-forming protein, proposed as an anti-tumor agent
- Effects of Bone Morphogenic Protein-4, helping to explain why its upregulation leads to atherosclerosis and hypertension
- Macro-vascular pulmonary endothelial cells accumulate HIF-1 under hypoxic conditions
- Transportation of bioactive lipids and its silencing by siRNA



[1]
(Click to Enlarge) **Human Pulmonary Artery Endothelial Cells: HPAEC** (A). HPAEC immunolabeled for CD31/PECAM (Cat# CB13678); nuclei stained with PI (red) (B). HPAEC transfected with GFP plasmid DNA using the Cytofect™ Endothelial Cell Transfection Kit (C,D).

Details

Tissue	Normal healthy human pulmonary artery
QC	No bacteria, yeast, fungi, mycoplasma, virus
Character	VIII-related Ag expression, Dil-Ac-LDL uptake
Bioassay	Attach, spread, proliferate in Growth Med
Cryovial	500,000 HPAEC (2nd passage) frozen in Basal Medium w/ 10% FBS, 10% DMSO
Kit	Cryovial frozen HPAEC (302-05a), Growth Medium (211-500), Subculture Rgnt Kit (090K)
Proliferating	Shipped in Gr Med, 3rd psg (flasks or plates)
Doublings	At least 15
Applications	Laboratory research use only (RUO). Not for human, clinical, diagnostic or veterinary use.

Instructions HPAEC

Format: PDF

[Download Now](#) [2]

Instructions HPAEC

Format: PDF

[Download Now](#) [3]

MSDS Cryopreserved Cells

Format: PDF

[Download Now](#) [4]

Products

Related Products

Extended Family Products

Resources/Documents

5 Important Cell Culture Rules

Format: PDF

[Download Now](#) ^[5]

Cell Apps Flyer Airway Cells

Format: PDF

[Download Now](#) ^[6]

Cell Apps Flyer Cardiovascular Cells

Format: PDF

[Download Now](#) ^[7]

Cell Apps Flyer Endothelial Cells

Format: PDF

[Download Now](#) ^[8]

Cell Apps Poster Primary Cells

Format: PDF

[Download Now](#) ^[9]

Citations



[Powered by Bioz](#) ^[10] [See more details on Bioz](#) ^[11]

Misc. Links

- [Site](#)
- [Privacy](#)
- [Returns](#)
- [Shipping](#)
- [Terms](#)
- [Disclaimer](#)
- [Distributors](#)

Contact Us

Cell Applications, Inc
6455 Weathers Place
San Diego, CA 92121
Open M-F, 8am-5pm PST

800-645-0848
info@cellapplications.com

Socialize With Us

•

Newsletter Signup

Subscribe to our newsletter

Source URL:<https://www.cellapplications.com/human-pulmonary-artery-endothelial-cells-hpaec>

Links

[1] https://www.cellapplications.com/sites/default/files/images_product_type/HPAEC.jpg
[2] [https://www.cellapplications.com/sites/default/files/documents/instructions/Instructions HPAEC Normal.pdf](https://www.cellapplications.com/sites/default/files/documents/instructions/Instructions%20HPAEC%20Normal.pdf) [3] [https://www.cellapplications.com/sites/default/files/documents/instructions/Instructions HPAEC-AS.pdf](https://www.cellapplications.com/sites/default/files/documents/instructions/Instructions%20HPAEC-AS.pdf) [4] [https://www.cellapplications.com/sites/default/files/documents/msds/MSDS Cryopreserved Cells.pdf](https://www.cellapplications.com/sites/default/files/documents/msds/MSDS%20Cryopreserved%20Cells.pdf) [5] [https://www.cellapplications.com/sites/default/files/documents/misc/5 Important Cell Culture Rules 241111.pdf](https://www.cellapplications.com/sites/default/files/documents/misc/5%20Important%20Cell%20Culture%20Rules%20241111.pdf)
[6] [https://www.cellapplications.com/sites/default/files/documents/misc/Cell Apps Flyer Airway Cells.pdf](https://www.cellapplications.com/sites/default/files/documents/misc/Cell%20Apps%20Flyer%20Airway%20Cells.pdf)
[7] [https://www.cellapplications.com/sites/default/files/documents/misc/Cell Apps Flyer Cardiovascular Cells.pdf](https://www.cellapplications.com/sites/default/files/documents/misc/Cell%20Apps%20Flyer%20Cardiovascular%20Cells.pdf) [8] [https://www.cellapplications.com/sites/default/files/documents/misc/Cell Apps Flyer Endothelial Cells.pdf](https://www.cellapplications.com/sites/default/files/documents/misc/Cell%20Apps%20Flyer%20Endothelial%20Cells.pdf) [9] [https://www.cellapplications.com/sites/default/files/documents/misc/Cell Apps Poster Primary Cells \(2017\).pdf](https://www.cellapplications.com/sites/default/files/documents/misc/Cell%20Apps%20Poster%20Primary%20Cells%20(2017).pdf) [10] <https://www.bioz.com/> [11] [https://www.bioz.com/result/302-05a/product/Cell Applications Inc/?cn=302-05a](https://www.bioz.com/result/302-05a/product/Cell%20Applications%20Inc/?cn=302-05a)