

Lifeline Cell Technology Certificate of Analysis

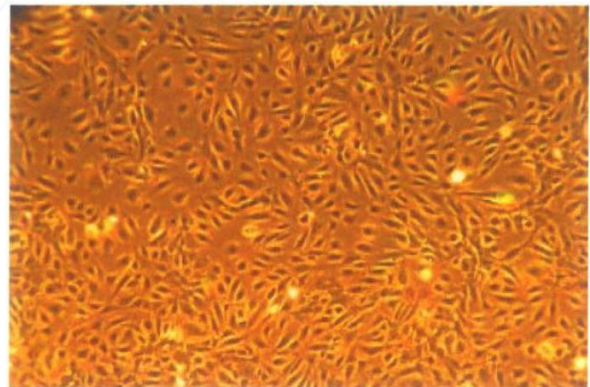
**Product Name:** Human Aortic Endothelial Cells, P<sub>2</sub>  
**Catalog Number:** FC-0014  
**Product Description:** Cryopreserved human aortic endothelial cells. Vials contain 500,000 cells in one ml cryopreservation solution.  
**Product Lot Number:** 01720  
**Manufacture Date:** FEB2011  
**Expiration Date:** Not applicable when stored below -150° C

**Product Information**

Donor Demographics: .....Sex: Male Tissue Source: Aorta Age: 31 years  
 Race: Hispanic Cause of Death: Anoxia  
 Recommended Culture Medium:.....VascuLife, LM-0002 supplemented with:  
 LifeFactor™ Kit, LS-1019 or LifeFactor™ Kit, LS-1020

Test	Specifications	Results
Sterility Test, bacteria, yeast and fungi	negative	negative
Sterility Test, mycoplasma	negative	negative
Hepatitis B (by PCR)	negative	negative
Hepatitis C (by PCR)	negative	negative
HIV-1 and II (by PCR)	negative	negative
Viable Cell Count	≥500,000	770,000 cells/ml
Viability (by Trypan Blue Exclusion)	>50% viable	81% viable
Cell Growth in VascuLife Medium		
Population Doubling capacity	>15 doublings	15.08 doublings
Cell morphology	normal	normal
Characterization		
Smooth muscle α-actin	negative	negative
Factor VIII	positive	positive

Picture of P<sub>5</sub> Aortic Endothelial Cells lot 01720 cultured in VascuLife EnGS Medium, day 5 in culture from an inoculation of 5,000 cells/cm<sup>2</sup>.



Quality Control Jeremy Hammond April 20, 2011

Jeremy Hammond, QC Director, Lifeline Cell Technology

To place an order call Lifeline technical and customer service at (877) 845-7787 or you may submit an order form by fax to (301) 845-2405. Order form available on line at [www.lifelinecelltech.com/order](http://www.lifelinecelltech.com/order).