

Certificate of Analysis

Human Umbilical Artery Endothelial Cells (HUAEC)

Description

Product Name	HUAEC-c / HUAEC-p
Order Number	C-12202 / C-12252
Lot Number	8061702.1
Donor Age / Sex / Race	newborn / male / caucasian
Tissue / Localization	umbilical cord / umbilical artery
Number of Viable Cells	550.000
Freezing Medium	Cryo-SFM (Order No.: C-29910)
QC Evaluation Medium	Endothelial Cell Growth Medium (Order No.: C-22010)
Stage of Culture	HUAEC-c: thawing and seeding results in passage 1 (2 nd culture) HUAEC-p: shipped in passage 1 (2 nd culture)

Viability & Growth Characteristics

Viability	90 % * (adherence of cells could vary under customer culture conditions)
Population Doubling (PD) Time in Log Phase	30.4 h / PD *
Population Doublings	> 15 *

Phenotypic Characterization (tested within the first two passages)

CD31	positive by immunohistochemical staining
vWF / Factor VIII-related antigen	positive by immunohistochemical staining
Dil-Ac-LDL uptake	positive by immunohistochemical staining
Smooth muscle α -actin	negative by immunohistochemical staining

Test for Microbial Contaminants and Infectious Viruses

Bacteria / Fungi / Mycoplasma	negative / negative / negative
HIV-1	negative
HBV / HCV	negative / negative

* Using PromoCell's standardized culture system and procedures. The stated values may vary under customer culture conditions.

The tissue used by PromoCell for the isolation of human cell cultures is derived from donors who have signed an informed consent form, which outlines in detail the purpose of the donation and the procedure for processing the tissue (www.promocell.com/ethics).



A handwritten signature in blue ink, appearing to read "C. Leppert".

Christian Leppert, Ph.D.
Quality Control Manager

Date: 27 Apr 2010

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.