

Certificate of Analysis

Human Dermal Microvascular Endothelial Cells (HDMEC), adult

Description

| | |
|------------------------|--|
| Product Name | HDMEC-c adult / HDMEC-p adult |
| Order Number | C-12212 / C-12262 |
| Lot Number | 9110305 |
| Donor Age / Sex / Race | 38 / female / caucasian |
| Tissue / Localization | skin / labia |
| Number of Viable Cells | 550.000 |
| Freezing Medium | Cryo-SFM (Order No.: C-29910) |
| QC Evaluation Medium | Endothelial Cell Growth Medium MV (Order No.: C-22020) |
| Stage of Culture | HDMEC-c: thawing and seeding results in passage 2 (3 rd culture) HDMEC-p: shipped in passage 2 (3 rd culture) |

Viability & Growth Characteristics

| | |
|--|--|
| Viability | 92 % * (adherence of cells could vary under customer culture conditions) |
| Population Doubling (PD) Time in Log Phase | 18.8 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 "S. Busch".

Silke Busch, Ph.D.
Quality Control Manager

Date: 17 Dec 2009

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