

## Rat Cardiac Microvascular Endothelial Cells

### ORDER INFORMATION

**Name of Cells:** Rat Cardiac Microvascular Endothelial Cells (**rCarMVECs**)  
**Catalogue Number:** **cAP-r0003**  
**Product Format:** Proliferating culture  
**Cell Number:** > 90% confluent in T25 flask

### General Information:

**rCarMVECs (cAP-r0003)** are isolated from heart tissues of adult SD rats. The cells are shipped in proliferating culture with >90 confluence (the cells are provided @ passage 3). Endo-Growth Medium (cAP-02) is recommended for the expansion of rCarMVECs and these cells can be propagated to sixth passage and beyond without losing their morphologic and phenotypic characteristics when cultured following the detailed protocol described below).

### Characterization of the cells

PECAM1: >**95% positive by immunofluorescence**  
VE-Cadherin: >**95% positive by immunofluorescence**  
negative for mycoplasma.

**Product Use:** rCarMVECs are for research use only.

**Shipping:** Proliferating culture in T25 flask.

### Handling of Arriving Cells

When you receive the cells, leave the flask in 37°C CO<sub>2</sub> incubator for 1 hour first, and then replace the transport medium with Endo-growth medium. Let the cells to grow for 24 hour before subculture if the cells are not completely confluent.

### 1. Subculture Protocol:

- A) Rinse the cells in T25 flask with 5ml DPBS (**Room Temperature, RT**) twice.
- B) Add 2ml of Trypsin/EDTA (**RT**) (Invitrogen Catalogue number: 25300-062) into T25 flask (make sure the whole surface of the T25 flask is covered with Trypsin/EDTA), and gently dispose the Trypsin/EDTA solution **within 10 seconds** with aspiration.
- C) Leave the T25 flask with the cells at **RT** for 1-2 minute (the cells will normally come off the surface within 1 minute, monitor the cell under microscopy).
- D) Suspend the cells with 20ml of Endo-Growth Medium and then split cell suspension into 2 T25 flasks (10ml each, and the cells are subcultured at 1:2 ratio)

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, [angioproteomie@gmail.com](mailto:angioproteomie@gmail.com)

## **2. Cell culture protocol (proliferating):**

- A) Endo-growth medium should be changed every other day.
- B) The cells normally become confluent within 5-6 days (when split at a 1:2 ratio).

Although primary cells are tested pathogen-free, investigators should handle these cells with caution and treat all animal cells as potential pathogens, since no test procedure can completely guarantee the absence of infectious agents.

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