

GFP Expressing Mouse Liver Microvascular Endothelial Cells
ORDER INFORMATION

Name of Cells: GFP Expressing Mouse Liver Microvascular Endothelial Cells (mLivMECs-GFP)
Catalogue Number: **cAP-m0011GFP**
Product Format: Frozen Vial
Cell Number: > 5 x 10⁵/vial

General Information

Mouse Liver Microvascular Endothelial cells (mLivMECs) are isolated from livers of 3-week old male C57BL/6 mice and GFP expressing mLivMECs-GFP were selected from puromycin resistant cells after transfected with lentiviral expressing GFP. Cells are shipped in a frozen vial (provided @ passage 3, with > 5 x 10⁵cells/vial). mLivMECs-GFP are cultured with specially formulated Endothelial Growth Medium (EGM, cAP-02). Since the cells have limited proliferation capacity (cells may be expanded for a maximum of 2-3 passages) in vitro, long term culture of mLivMECs is not recommended, even cultured following the detailed protocol described below.

Characterization:
Positive:

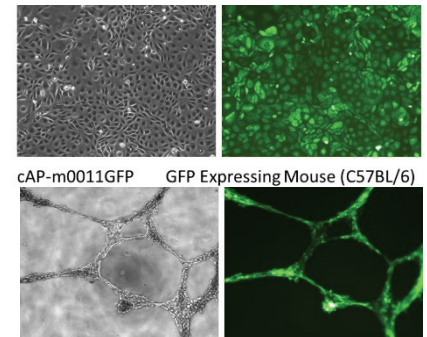
CD31 > 98%
 CD34 > 95%

mLECs-GFP are tested negative for common animal pathogen and mycoplasma.

Product Use: **mLivMECs-GFP** are for Research Use Only.
Shipping: Frozen vials with > 5 x10⁵cells /vial at passage 3.

Handling of Arriving Cells

When you receive the cells in a frozen vial, you can transfer the vial of cells into a -80°C freezer for short term storage or a liquid nitrogen tank for long term storage. Thaw the cells in a 37°C water bath, and then transfer the cells into a T75 flask pre-coated with quick coating solution (cAP-01) as described in details in Subculture Protocol.



Tube formation of Expressing Mouse Liver Microvascular Endothelial Cells (on Matrigel)

Subculture Protocol

- A) Pre-coating of T75 flasks:
 - Add 3ml of Quick Coating Solution into one T75 flask and make sure the whole surface of the flask is covered with the Coating Solution;
 - Leave the T75 flask with the Quick solution for 5 minutes;
 - Aspirate off the excessive Coating Solution and the flask is ready to be used.
- B) When the cells are nearly confluent (>95%), rinse the cells in T75 flask with 10ml HBSS (**Room Temperature, RT**) twice.
- C) Add 3ml of Trypsin/EDTA (**RT**) (cAP-23) into one T75 flask (make sure the whole surface of the T75 flask is covered with Trypsin/EDTA), and gently dispose the excessive Trypsin/EDTA solution **within 30 seconds** with aspiration.
- D) Leave the T75 flask with the cells at **RT** for 3-5 minute (the cells usually will detach from the surface within 1-2 minutes). You must monitor the cells under microscope and when most of cells become rounded up, hit the flask gently against the bench surface, and the cells will move on the surface of the flask when monitoring under microscope.
- E) Add 5ml Trypsin Neutralization Buffer (cAP-28) and spin the cells down with 800g for 5 minutes.
- F) Re-suspend the cell pellet with 20ml of full cell culture medium and the cell suspension is transferred directly into 2 pre-coated T75 flasks (10ml each, and the cells are sub-cultured at 1:2 ratios)
- G) Change medium every 2-3 days and cells usually become confluent within 7-10days (when split at a 1:2 ratio). But the cells will lose the capacity to proliferate further within 2-3 passages.

Related Products:

Quick Coating Solution	cAP-01	240ml	Angio-Proteomie
Endothelial Growth Medium	cAP-02	500ml	Angio-Proteomie
Endothelial Basal Medium	cAP-03	500ml	Angio-Proteomie
HBSS w/o Ca ²⁺ , Mg ²⁺	cAP-11	100ml	Angio-Proteomie
Cell Freezing Solution (FBS)	cAP-22	50ml	Angio-Proteomie
Cell Freezing Solution (Non-FBS)	cAP-22B	50ml	Angio-Proteomie
Trypsin/EDTA Solution	cAP-23	100ml	Angio-Proteomie
Trypsin Neutralization Solution	cAP-28	100ml	Angio-Proteomie
ITS (100x)	cAP-26	10ml	Angio-Proteomie
L-Glutamine-MAXIMUM (100x)	cAP-27	100ml	Angio-Proteomie
Human Plasma Fibronectin Solution	cAP-42	1mg/ml	Angio-Proteomie

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Caution: Handling human and animal tissue derived products is potentially bio-hazardous. Although each cell strain is tested negative for HIV, HBV and HCV DNA, or pathogens, diagnostic tests are not necessarily 100% accurate; therefore proper precautions must be taken to avoid inadvertent exposure. Always wear gloves and safety glasses when working with these materials. Never mouth pipette. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination.