

## Product Information

### Mouse Aortic Endothelial Cell (MAOEC)

Catalog Number	10MU-002	Cell Number	>0.5 x 10 <sup>6</sup> Cells
Species	<i>Mus musculus</i>	Cell Condition	Cryopreserved

## Description

Mouse Aortic Endothelial Cells (MAOEC) line the vessel wall of aorta, and are constantly exposed to high hemodynamic forces. They produce endothelium-derived substances regulating vasoconstriction and vessel growth [1]. MAOEC also modulate the expression of cellular adhesion molecules to control and fine-tune inflammatory responses and fibrinolysis [2]. These physiological properties allow MAOEC cultures to be widely used in the study of mechanisms for endothelium dysfunction, pathogenesis of vascular diseases and atherosclerosis, and the development of novel disease treatments.

iXCells Biotechnologies provides high quality Mouse Aortic Endothelial Cells (MAOEC), which are isolated mouse aorta and cryopreserved at P2, with >0.5 million cells in each vial. MAOEC express vWF/Factor VIII, CD31 (PECAM) and Dil-Ac-LDL by uptake. These MAOEC are negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi and can further expand for 6 population doublings in Endothelial Cell Growth Medium (Cat# MD-0010) under the condition suggested by iXCells Biotechnologies.

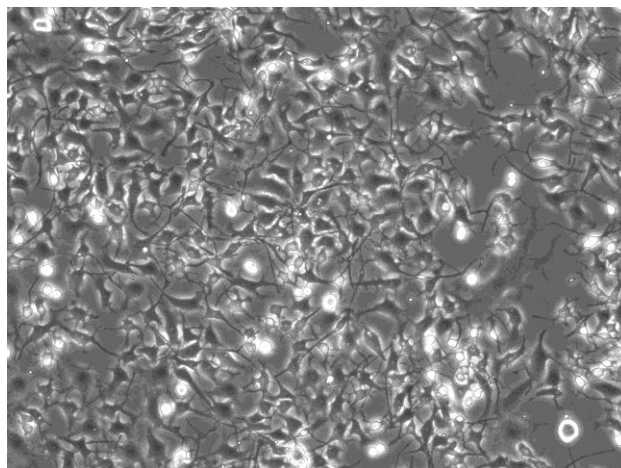


Figure 1. MAOEC in Bright Field

## Product Details

<b>Tissue</b>	Aorta of C57BL6 mice
<b>Package Size</b>	0.5 million cells/vial
<b>Passage Number</b>	P2
<b>Shipped</b>	Frozen
<b>Growth Properties</b>	Adherent
<b>Media</b>	Endothelial Cell Growth Medium (Cat# MD-0010)

## Protocols

### Standard Culture Procedure

1. Upon receipt of the frozen MAOEC, it is recommended to thaw the cells and initiate the culture immediately in order to retain the highest cell viability.
2. To thaw the cells, put the vial in 37°C water bath with gentle agitation for ~1 minute. Keep the cap out of water to minimize the risk of contamination.
3. Pipette the cells into a 15ml conical tube with 5ml fresh Endothelial Cell Growth Medium (Cat# MD-0010).
4. Centrifuge at 1000rpm (~220g) for 5 minutes under room temperature.
5. Remove the supernatant and resuspend the cells in fresh Endothelial Cell Growth Medium.
6. Culture the cell in 100 mm culture dish or T75 flask.

**Safety Precaution:** *it is highly recommended that protective gloves and clothing should be used when handling frozen vials.*

## References

- [1] Ando J, and Kamiya A. Flow-dependent regulation of gene expression in vascular endothelial cells. *Heart J.* 1996; 37:19-32.
- [2] Nishiyama T, et al and Saito I. Functional analysis of an established mouse vascular endothelial cell line. *J Vasc Res.* 2007;44(2):138-148

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