

Product Information

Porcine Pulmonary Artery Smooth Muscle Cells (PPASMC)

Catalog Number	10PO-007	Cell Number	0.5 x 10 ⁶ cells/vial
Species	<i>Sus scrofa</i>	Storage Temperature	Liquid Nitrogen

Description

iXCells Biotechnologies provides high quality Porcine Pulmonary Artery Smooth Muscle Cells (PPASMC), which are isolated from porcine pulmonary artery and cryopreserved at P2, with >0.5 million cells in each vial. PPASMC provide a useful in vitro model to study cellular and molecular mechanisms of pulmonary hypertension characterized by hyperproliferation of pulmonary artery smooth muscle cells. PPASMC are positive for smooth muscle cell specific alpha-actin expression. They are negative for mycoplasma, bacteria, yeast, and fungi and can further expand in Porcine Smooth Muscle Cell Growth Medium (Cat# MD-0075) under the condition suggested by iXCells Biotechnologies.

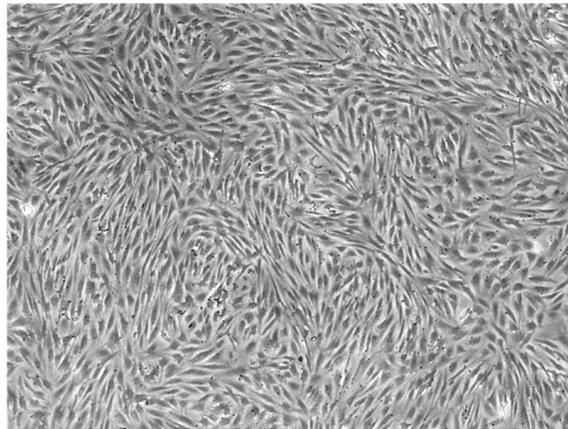


Figure 1. Phase contrast image of Porcine Pulmonary Artery Smooth Muscle Cells (PPASMC).

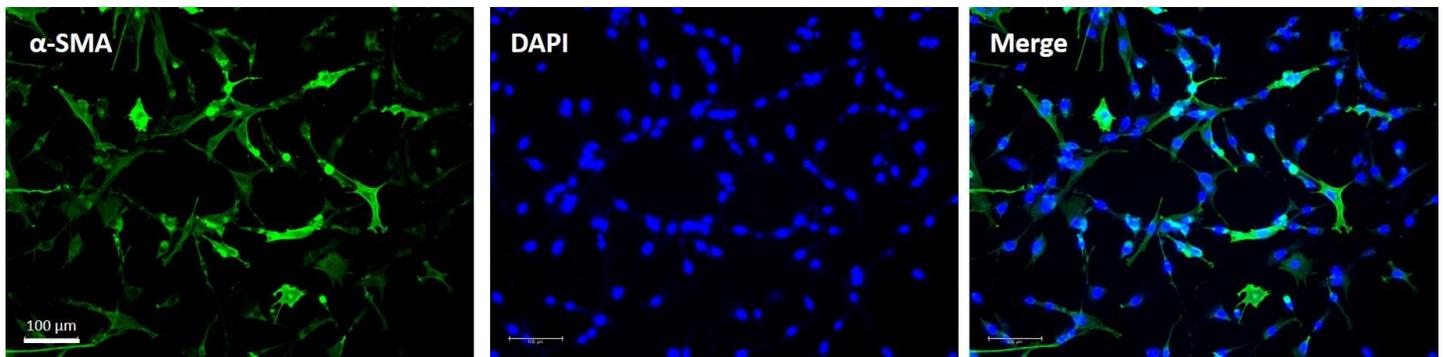


Figure 2. Immunofluorescence staining of Porcine Pulmonary Artery Smooth Muscle Cells (PPASMC) using α -SMA antibody (green). Scale bar: 100 μ m.

Product Details

Tissue	Porcine pulmonary artery
Package Size	0.5 x 10 ⁶ cells/vial
Passage Number	P2
Shipped	Cryopreserved
Storage	Liquid nitrogen
Growth Properties	Adherent
Media	Porcine Smooth Muscle Cell Growth Medium (Cat# MD-0075)

Protocols

Thawing of Frozen Cells

1. Upon receipt of the frozen Porcine Pulmonary Artery Smooth Muscle Cells (PPASMC), it is recommended to thaw the cells and initiate the culture immediately in order to retain the highest cell viability.
2. Coat the culture vessels with 0.1% gelatin for more than 20 minutes at room temperature before use.
3. 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.
4. Pipette the cells into a 15ml conical tube with 5ml fresh Porcine Smooth Muscle Cell Growth Medium (Cat# MD-0075).
5. Centrifuge at 1,000rpm (~220g) for 5 minutes under room temperature.
6. Remove the supernatant and resuspend the cells in fresh culture medium.
7. Culture PPASMC in 100 mm culture dish or T75 flask pre-coated with 0.1% gelatin.

8. Change the medium every other day until the culture is approximately 90% confluent.

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

Standard Culture Procedure

1. Porcine Pulmonary Artery Smooth Muscle Cells (PPASMC) can be cultured in Porcine Smooth Muscle Cell Growth Medium (Cat# MD-0075).
2. When cells reach ~80-90% confluence, remove the medium, and wash once with sterile PBS (5ml/T75 flask).
3. Add ~2.5ml of 0.25% Trypsin-EDTA to the flask and incubate for ~3 minutes at 37°C. Neutralize the enzyme by adding 2-3 volumes of cell culture medium.
4. Centrifuge 1,000rpm (~220g) for 5min and resuspend the cells in desired volume of medium.
5. Seed PPASMC on the gelatin-coated new culture vessels at 5×10^3 cells/cm².

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While iXCells Biotechnologies uses reasonable efforts to include accurate and up-to-date information on this product sheet, we make no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. iXCells Biotechnologies does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. iXCells Biotechnologies is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, iXCells Biotechnologies is not liable for damages arising from the misidentification or misrepresentation of cultures.
© iXCells Biotechnologies 2015. All rights reserved.