

Rat Type II Alveolar Epithelial Cells

Cat. No. ARP0179, 5×10^5 cells/vial

Description

Research on the Rat Type II Alveolar Epithelial Cells is essential to the study of acute respiratory distress syndrome (ARDS), pulmonary fibrosis, ventilator-induced lung injury, surfactant deficiency disorders, and hyperoxia-induced alveolar damage. The lungs are the central organs of the human respiratory system, responsible for gas exchange, delivering oxygen to the blood while removing waste (carbon dioxide). They are a pair of spongy, pinkish-gray organs located in the chest, with their surfaces covered by the pleura. The lungs are connected to the trachea through the bronchi, and their interiors are filled with alveoli, which provide a large surface area for efficient gas exchange during respiration. The Rat Type II Alveolar Epithelial Cells are to be used with Rat Type II Alveolar Epithelial Cell Medium (Cat. No. ACM0179). This product is intended for laboratory in vitro use only. It is not intended for diagnostic, therapeutic, or clinical applications.

Specification

Cell Type: Epithelial Cells

Tissue/Organ: Lung

Disease: Normal

Species: *Rattus norvegicus* (Rat)

Genetic Background: N/A

Markers: Pulmonary Surfactant Protein A (SP-A)

Symbols: RTIIAEC

Shipping & Storage

Shipping condition: Frozen on dry ice.

Storage condition: Liquid nitrogen (LN₂) cryopreservation.

Intended Use

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Culturing Guidance

Morphology: Cobblestone-like, Irregular

Growth Mode: Adherent

Temperature: 37°C

Atmosphere: 5% CO₂

Unpacking and Storage Instructions

1. Visually inspect all packaging components for integrity and verify adequate dry ice.
If any damage is observed, notify Ascent Technical Support immediately.
2. Prioritize transfer to liquid nitrogen vapor phase storage system (-130°C or below).
Secondary option: -80°C mechanical freezer (short-term storage only).
Always maintain temperature strictly below -65°C.

Disclaimer

Ascent Research endeavors to provide accurate and up-to-date product information. However, no warranties or representations are made regarding its completeness or reliability. References to scientific literature and patents are for informational purposes only, and the customer assumes sole responsibility for verifying their accuracy.

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