

Canine Brain Microvascular Endothelial Cells

Cat. No. ARP1213, 5×10^5 cells/vial

Description

Canine brain microvascular endothelial cells are primary cells isolated from the brain microvasculature of Beagle dog. These cells are supplied cryopreserved at an early passage stage to help retain key physiological properties relevant to in vitro research.

Within the central nervous system, the brain microvasculature forms the vascular interface of cerebral capillaries and is a core structural component of the blood-brain barrier. Brain microvascular endothelial cells line these vessels and help regulate exchange between the circulation and neural tissue.

In their native tissue environment, these endothelial cells establish a selective barrier that controls the movement of nutrients, ions, and metabolites across brain capillaries. They also support cerebrovascular homeostasis through interactions with pericytes, astrocytes, and other components of the neurovascular unit, while participating in inflammatory signaling pathways relevant to vascular function and disease.

These cells are well suited for blood-brain barrier modeling, neurovascular biology studies, drug transport and permeability assays, and cerebrovascular inflammation research. For additional product or donor information, please contact Ascent Research.

Specification

Cell Type: Endothelial cell

Tissue/Organ: Brain

Disease: Normal

Species: Canis familiaris (Dog)

Genetic Background: Beagle Dog

Markers: N/A

Symbols: N/A



Shipping & Storage

Shipping condition: Frozen on dry ice.

Storage condition: Liquid nitrogen (LN₂) cryopreservation.

Intended Use

This product is intended for laboratory in vitro use only. It is not intended for diagnostic, therapeutic, or clinical applications.

Culturing Guidance

Morphology: Epithelial-like

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

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