www.ascentresearch.com
+1-202-949-4794
info@ascentresearch.com

Rat Abdominal Aortic Smooth Muscle Cells

Cat. No. ARP0200, 5×10^5 cells/vial

Description

Research on the Rat Abdominal Aortic Smooth Muscle Cells is essential to the study of abdominal aortic aneurysm formation, vascular calcification, atherosclerosis progression, hypertension-mediated remodeling, and post-interventional restenosis. The aorta is the largest artery and the main vessel that carries oxygenated blood from the left ventricle into the systemic circulation. All arteries in the systemic circulation arise from the aorta either directly (like the coronary or brachiocephalic arteries) or through its branches (e.g., femoral artery via the iliac arteries), distributing oxygenated blood to peripheral tissues and organs. The abdominal aorta gives rise to four unpaired arteries and five paired arteries, which supply oxygen and nutrients to the abdominal tissues and organs, including the liver, gallbladder, spleen, pancreas, stomach, intestines, and kidneys. Cells isolated from the abdominal aorta can be used in research on systemic circulation and vascular diseases, such as abdominal aortic aneurysm. The Rat Abdominal Aortic Smooth Muscle Cells are to be used with Rat Abdominal Aortic Smooth Muscle Cell Medium (Cat. No. ACM0200). This product is intended for laboratory in vitro use only. It is not intended for diagnostic, therapeutic, or clinical applications.

Specification

Cell Type: Muscle Cells

Tissue/Organ: Artery (abdominal aorta)

Disease: Normal

Species: Rattus norvegicus (Rat)

Genetic Background: N/A

Markers: α-Smooth Muscle Actin (α-SMA)

Symbols: RAASMC

Shipping & Storage

Shipping condition: Frozen on dry ice.

Storage condition: Liquid nitrogen (LN_2) cryopreservation.

Intended Use

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Culturing Guidance

Morphology: Elongated fusiform, Irregular

Growth Mode: Adherent

Temperature: 37°C

Atmosphere: 5% CO_2

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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