

Human Primary Pulmonary Arterial Fibroblast Cells

A primary cell isolate with application in cell-based screening and life science research

The primary cell isolate was prepared from human tissue obtained with full ethical permission. Human pulmonary artery was treated enzymatically to collect cells which were seeded into tissue culture treated dishes. Cells were fluorescence-activated cell sorting (FACS) sorted with fibroblast markers and the harvested fibroblast cell population was grown in medium optimized for primary human pulmonary arterial cells. Cells were banked by cryopreservation under liquid nitrogen. Cells were characterized by flow cytometric analysis of cell markers. Fibroblasts were further selected using FSP-1 labeled immuno-magnetic beads.

DONOR TISSUE FEATURES

- Male donor, BMI 33, 38 years
- Additional donor history available on request

CELL CHARACTERISTICS

Batch number:	12-1611
Vial content:	0.5x10 ⁶ cells
Appearance:	Monolayer of fibroblast shaped cells
Seeding density:	6,000 cells/cm ²
Culture medium:	AvantiCell medium recommended (AF-HNM-01)
Recovery from frozen:	80%
Doubling time:	5 days
Mycoplasma test:	Negative (by real time PCR mycoplasma assay)
Virus tests:	HIV-1, HIV-2, HBV, HCV, HTLV1, HTLV2 (Serology screening - negative)
Other tests:	Yeast, fungus (Negative)



Cell morphology. Cells in culture were photographed using a phase contrast microscope. (Bar 50μm)

FLOW CYTOMETRY CELL ANALYSIS

Cell Marker	Target Description	Population Positive*
Exto-5' nucleotidase	Intestinal fibroblast marker	97.13%
Alpha SMA	Myofibroblast marker	80.48%

*Percentage of cells with fluorescence greater than the isotype control background

USES AND RESTRICTIONS

- Store at -150°C. Once thawed do not re-freeze
- For research use ONLY — not suitable for *in vitro* diagnostic use or human or animal treatment
- Potential biohazard — handle with care

Leaders in Cell Culture