

Human Primary Pulmonary Arterial Fibroblast Cells

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

PRODUCT OVERVIEW

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 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.

TISSUE FEATURES

- Male donor, BMI 33, 38 years

CELL CHARACTERISTICS

Batch number:	12-1611
Mycoplasma test:	Negative (by RT-PCR mycoplasma assay)
Virus tests:	HIV1, HIV2, HBV, HCV, HTLV1, HTLV2 (Serology screening-negative)
Other tests:	Fungus, yeast (negative)
Passage:	P+7
Population doubling:	5 days
Appearance:	Monolayer of epithelial shaped cells
Culture medium:	AvantiCell medium (AF-HNM-01)
Seeding density:	6,000 cells/cm ²
Recovery from frozen:	80% viability



 Figure 1

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

FLOW CYTOMETRY CELL ANALYSIS

Cell Marker	Target Description	Population (Positive) ^a
Exto-5' nucleotidase	Interstitial fibroblast marker	97.13%
alpha SMA	Myofibroblast marker	80.48%

^a Percentage of cells with fluorescence greater than the isotype control background

USES AND RESTRICTIONS

- Further expansion potential for up to 3 population doublings
- 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