

Human Primary Lung Fibroblast Cells – Idiopathic Pulmonary Fibrosis

Human primary cells expressing an idiopathic pulmonary fibrosis (IPF) phenotype with application in cell-based screening and life science research

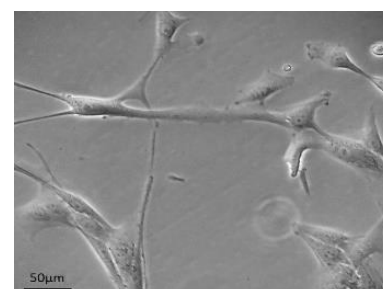
The primary cell isolate was prepared from human tissue obtained with full ethical permission. Tissue was dissected and dissociated by proteolytic digestion. A fibroblast population was isolated using FSP-1 immunomagnetic selection and propagated in customised fibroblast culture medium. Cells were banked by cryopreservation under liquid nitrogen. The cell population was analysed by fluorescence-activated flow cytometry.

DONOR TISSUE FEATURES

- Male donor, 61 years
- Airway bronchial tree, IPF

CELL CHARACTERISTICS

Batch number:	15-0705
Vial content:	0.5x10 ⁶ cells
Appearance:	Elongated spindle shaped cells
Seeding density:	3,000 – 4,000 cells/cm ²
Population doubling:	2 days
Culture medium:	AvantiCell medium (LF-HNM-01) recommended
Recovery from frozen:	>90% viability
Mycoplasma test:	Negative (by ELISA mycoplasma assay)
Virus tests:	HIV1, HIV2, HAV, HBV, HCV, HTLV1, HTLV2 (negative by real time PCR screen)
Other tests:	Fungus, yeast (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*
Expto-5' nucleotidase	Interstitial fibroblast marker	99.46%
αSMA	Myofibroblast marker	83.45%

*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