

Human Primary Lung Epithelial Cells – Idiopathic Pulmonary Fibrosis

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

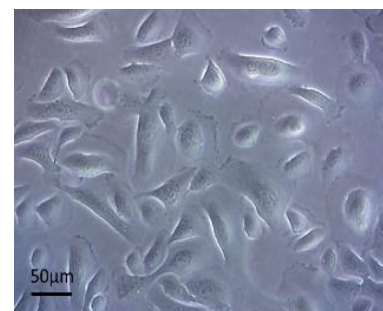
The primary cell isolate was prepared from human tissue obtained with full ethical permission. Cells were isolated by enzymatic digestion and cultured in optimal conditions for epithelial growth. Fibroblasts were removed from culture using negative FSP-1 immunomagnetic selection. Cells were banked and cryopreserved under liquid nitrogen. The cell population was analysed by fluorescence-activated flow cytometry.

TISSUE FEATURES

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

CELL CHARACTERISTICS

Batch number:	15-0705
Vial content:	0.5x10 ⁶ cells
Appearance:	Rounded flat cells with central nuclei
Seeding density:	5,000-6,000 cells/cm ²
Population doubling:	2-3 days
Culture medium:	BEGM (Lonza recommended)
Surface coating:	Human type IV collagen
Recovery from frozen:	66% viability
Mycoplasma test:	Negative (by PCR-based assay)
Virus tests:	Negative for HIV1, HIV2, HAV, HBV, HCV, HTLV1, HTLV2 (by real time PCR screening)
Other tests:	Fungus, yeast (Negative)



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

FLOW CYTOMETRY CELL ANALYSIS

Cell Marker	Target Description	Population Positive*
Epi-CAM (CD326)	Epithelial marker	81.2%
E-Cadherin	Epithelial marker	27.4%

*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