

## Human Primary Lung Fibroblasts – Idiopathic Pulmonary Fibrosis

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

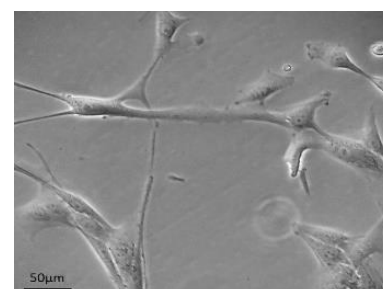
The primary cell isolate was prepared from human tissue obtained with full ethical permission. Tissue was dissected and dissociated by proteolytic digestion. A fibroblast population was isolated using FSP-1 immunomagnetic selection and propagated in customised fibroblast culture medium. Cells were banked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

### DONOR TISSUE FEATURES

- Male donor, 61 years, additional donor history available on request
- Airway bronchial tree, IPF

### CELL CHARACTERISTICS

|                       |  |
|-----------------------|--|
| Batch number:         | 15-0705  |
| Vial content:         | 0.5x10 <sup>6</sup> cells                            |
| Appearance:           | Elongated spindle shaped cells                       |
| Seeding density:      | 3,000 – 4,000 cells/cm <sup>2</sup>                  |
| Population doubling:  | 2 days   |
| Culture medium:       | AvantiCell medium (LF-HDM-01) recommended            |
| Recovery from frozen: | >90% viability                                       |
| Mycoplasma test:      | Negative (by luminescence-based mycoplasma screen)   |
| Virus tests:          | Negative for HIV1, HIV2, HBV, HCV (by real time PCR) |
| Other tests:          | Negative for fungus, yeast, bacteria                 |



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 | Interstitial fibroblast marker | 99.46%               |
| αSMA                 | Myofibroblast marker           | 83.45%               |

\*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