

Human Primary Lung Epithelial Cells – Chronic Obstructive Pulmonary Disease (COPD)

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

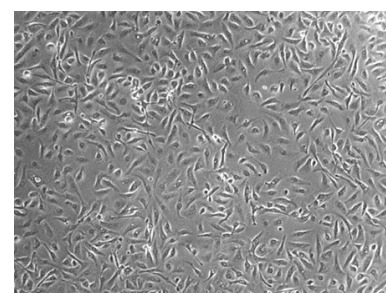
The primary cell isolate was prepared from human tissue obtained with full ethical permission. Cells were isolated by enzymatic digestion and cultured in optimal conditions for epithelial growth. Cells were banked and cryopreserved under liquid nitrogen after no more than 3 population doublings. The cell population was analysed by fluorescence-activated flow cytometry.

DONOR TISSUE FEATURES

- Female donor, 38 years, additional donor history available on request
- Airway, bronchi – COPD

CELL CHARACTERISTICS

Batch number:	11-0608
Vial content:	0.5x10 ⁶ cells
Appearance:	Flat cells with central nuclei
Seeding density:	5,000 - 6,000 cells/cm ²
Culture medium:	BEGM (Lonza)
Surface coating:	Human type IV collagen
Recovery from frozen:	86.6%
Doubling time:	2-3 days
Mycoplasma test:	Negative (by luminescence-based mycoplasma assay)
Virus tests:	Negative for HIV1, HIV2 (by real-time PCR screen)
Other tests:	Negative for yeast, fungus, bacteria



Cell morphology. Cells in culture were photographed using a phase contrast microscope. (Magnification: x10)

FLOW CYTOMETRY CELL ANALYSIS

Cell Marker	Target Description	Population Positive*
Epi-CAM (CD326)	Epithelial marker	54.00%
E-Cadherin	Epithelial marker	80.14%

*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