

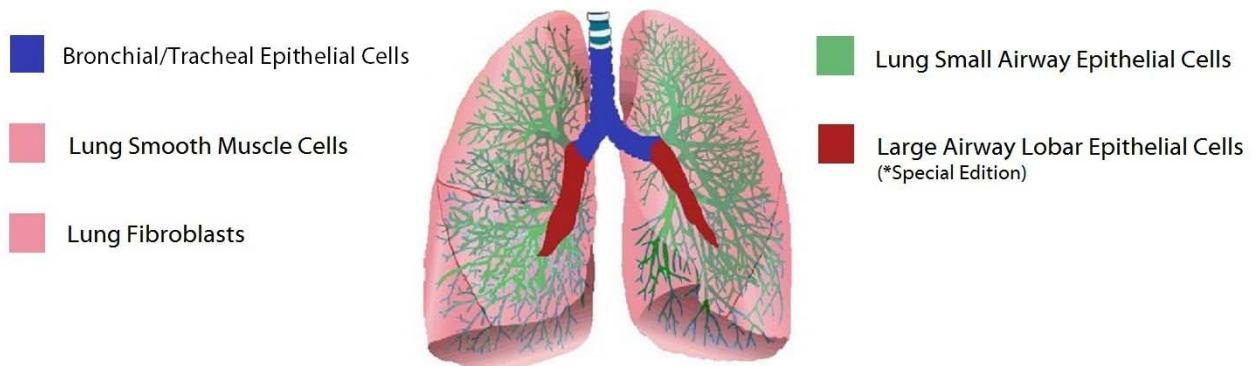
Normal Human Lung Cell Systems and Media

Bronchial/Tracheal Epithelial Cells
Lung Small Airway Epithelial Cells
Large Airway Lobar Epithelial Cells (*Special Edition)

Lung Fibroblasts
Lung Smooth Muscle Cells

Lifeline’s Normal Human Lung Cells, when grown in Lifeline brand culture medium, provide ideal culture models for the study of pulmonary diseases such as Asthma, COPD, Cystic Fibrosis, Lung Cancer as well as the effects of smoking on respiratory health.

Lifeline’s lung cells are cryopreserved as primary or secondary cells to ensure the highest viability and plating efficiency. Our Bronchial/Tracheal Epithelial Cells and Large Airway Lobar Epithelial cells are cultured in BronchiaLife B/T Medium. Our Lung Small Airway Epithelial Cells are cultured in BronchiaLife SAE Medium. Our Human Lung Smooth Muscle Cells are cultured in VascuLife SMC Medium and the Lung Fibroblasts are cultured in FibroLife® S2 Medium. Lifeline’s cells need not be exposed to antimicrobials or phenol red when cultured in Lifeline culture media. Lifeline offers these traditional supplements; however they are not needed, or recommended, to achieve optimal cell performance in most research applications; an advantage as these supplements can cause cell stress and “masking effects” that may negatively impact experimental results. *Lifeline’s Special Edition Large Airway Lobar Epithelial Cells are guaranteed for sterility, virus testing and cell count only.



HUMAN LUNG CELLS ARE TESTED FOR:	
• Cell Count	500,000 cryopreserved cells per vial
• Proliferation	Population growth at various densities
• Morphology	Normal cell appearance for 15 population doublings
• Sterility Testing	Negative for mycoplasma Negative for bacterial and fungal growth
• Virus Testing	Negative for HIV-1, HIV-2, HBV, and HCV by PCR
• Specific Staining (Lung Smooth Muscle Cells)	Negative for von Willebrand Factor Positive for Smooth Muscle α -Actin after differentiation

**Lifeline Technical Note: There are different and often contradictory terminologies used by cell culture companies to define the passage number of cells. Lifeline’s designation of ‘primary cells’ are cells that have been isolated from tissue, plated onto culture vessels, expanded, harvested and cryopreserved. The term ‘secondary’ indicates that the cells have been isolated, plated and expanded in culture vessels twice before being harvested for cryopreservation.*

To place an order, please visit lifelinecelltech.com or call technical and customer service at 877.845.7787.

Quality Testing for Guaranteed Consistency and Reproducible Results

Lifeline Cell Technology manufactures products using the highest quality raw materials and incorporates extensive quality assurance in every production run. Exacting standards and production procedures ensure consistent performance.

The Lifeline® Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. All donated tissues have been obtained under proper informed consent and adheres to the Declaration of Helsinki, The Human Tissue Act (UK), CFR Title 21, and HIPAA Regulations relative to obtaining and handling human tissue for Research Use. If Lifeline's products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. Upon request, Lifeline will provide lot specific QC test results, material safety data sheets, and certificates of analysis. See complete guarantee/warranty statement at lifelinecelltech.com or contact your Lifeline representative for more information.

Safety Statement

This product is **For Research Use Only**. This product is not approved for human or veterinary use, or for use in *in vitro* diagnostic or clinical procedures.

Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any nitrogen from cryopreserved vials in a biosafety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for up to 24 hours prior to being thawed.

PRODUCT INFORMATION:	
Part #	Description
FC-0035	Normal Human Bronchial/Tracheal Epithelial Cells, Primary – 500,000 per vial
FC-0054	Large Airway Lobar Epithelial Cells, Secondary – 500,000 per vial
LL-0023	BronchialLife B/T Medium Complete Kit - <i>For the culturing of Bronchial/Tracheal Epithelial Cells and Large Airway Lobar Epithelial Cells</i>
FC-0016	Lung Small Airway Epithelial Cells
LL-0037	BronchialLife SAE Medium Complete Kit - <i>For the culturing of Lung Small Airway Epithelial Cells</i>
FC-0049	Human Lung Fibroblast, Primary – 500,000 per vial
LL-0011	FibroLife® S2 Complete Kit <i>for the culturing of Human Lung Fibroblasts Cells</i>
FC-0046	Human Lung Smooth Muscle Cells, Primary – 500,000 per vial
LL-0014	VascuLife® SMC Medium Complete Kit - <i>For the culturing of Human Lung Smooth Muscle Cells</i>

Call Lifeline Technical Service and Sales at [877.845.7787](tel:877.845.7787)
or visit lifelinecelltech.com for more information

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