Human Airway Epithelial Cells
Specification Sheet

Human Bronchial/Tracheal Epithelial Cells (HBTEC)
Human Lobar Bronchial Epithelial Cells (HLBEC)
Human Small Airway Epithelial Cells (HSAEC)
Human Laryngeal Epithelial Cells (HLEC)
Human Bronchial/Tracheal Epithelial Cells-Cystic Fibrosis (HBTEC-CF)
Human Small Airway Epithelial Cells-Asthma + Chronic Obstructive Pulmonary Disease (HSAEC-A+COPD)

**CELL FEATURES:**
- HBTEC and HBTEC-CF are cryopreserved as primary cells*.
- HLBEC are cryopreserved as primary cells*.
- HSAEC and HSAEC-A+COPD are cryopreserved as primary cells*.
- HLEC are cryopreserved as primary cells*.
- Human Airway Epithelial Cells provide an ideal model for the studies of toxicity, cystic fibrosis, asthma, pathogenesis, pharmacology or airway wound healing.
- Lifeline’s Human Airway Epithelial Cells are not exposed to retinoic acid during isolation or expansion.
- Lifeline’s Human Airway Epithelial Cells are extensively tested for quality and optimal performance.
- Lifeline guarantees performance and quality.

**HUMAN AIRWAY EPITHELIAL CELLS ARE TESTED FOR:**
- Cell Count 500,000 cryopreserved cells per vial
- Proliferation and Morphology Normal cell appearance for 15 population doublings
- Cell Viability Minimum 70% viability when thawed from cryopreservation
- Sterility Testing Negative for mycoplasma
  Negative bacterial and fungal growth
- Virus Testing Negative for HIV-1, HIV-2, HBV, and HCV by PCR

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>FC-0016</td>
<td>HSAEC Normal Human Small Airway Epithelial Cells, Primary – 500,000 cells per vial</td>
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<tr>
<td>FC-0035</td>
<td>HBTEC Normal Human Bronchial/Tracheal Epithelial Cells, Primary – 500,000 cells per vial</td>
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<td>FC-0045</td>
<td>HLEC Normal Human Laryngeal Epithelial Cells, Primary – 500,000 cells per vial</td>
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<td>FC-0054</td>
<td>HLBEC Normal Human Lobar Bronchial Epithelial Cells, Primary – 500,000 cells per vial</td>
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<tr>
<td>FC-0067</td>
<td>HSAEC-A+COPD Diseased Human Small Airway Epithelial Cells-Asthma + Chronic Obstructive Pulmonary Disease, Primary – 500,000 cells per vial</td>
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<tr>
<td>FC-0103</td>
<td>HBTEC-CF Diseased Human Bronchial/Tracheal Epithelial Cells-Cystic Fibrosis, Primary – 500,000 cells per vial</td>
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<tr>
<td>LL-0023</td>
<td>BronchiaLife™ Medium Complete Kit (BronchiaLife Basal Medium, BronchiaLife LifeFactors® Kit)</td>
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<tr>
<td>LS-1104</td>
<td>GA Antimicrobial Supplement, 0.5 mL (Gentamicin 30 mg/mL, Amphotericin B 15 µg/mL); provided with purchase of LL-0023</td>
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*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.

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

Lifeline Cell Technology • 8415 Progress Drive, Suite T • Frederick, MD 21701
Lifeline’s Human Airway Epithelial Cells

Lifeline’s Human Airway Epithelial Cells, when grown in Lifeline’s BronchiaLife™ medium, provide an ideal serum-free culture model for the accurate studies of toxicity, cystic fibrosis, asthma, pathogenesis, pharmacology, or airway wound healing.

Lifeline’s Human Airway Epithelial Cells are cultured without retinoic acid and cryopreserved as primary cells* to ensure the highest viability and plating efficiency. Lifeline’s Human Airway Epithelial Cells are quality tested in BronchiaLife Medium to ensure proper growth and morphology over a period of at least 15 population doublings.

Lifeline’s Human Airway Epithelial Cells are not exposed to antimicrobials or phenol red when cultured in the respective Lifeline® medium. Lifeline offers antimicrobials and phenol red; however, they are not required for eukaryotic cell proliferation. A vial of Gentamicin and Amphotericin B (GA; LS-1104) is provided with the purchase of BronchiaLife Medium Complete Kit (LL-0023) for your convenience. The use of GA is recommended to inhibit potential fungal or bacterial contamination of eukaryotic cell cultures. Phenol Red (LS-1009) may be purchased, but is not required.

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. 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.

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.

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 diagnostics 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 liquid nitrogen from cryopreserved vials by carefully loosening the vial cap 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.