Normal Human Corneal Epithelial Cells (HCEC)
Specification Sheet

Cell Features:
- HCEC are cryopreserved as secondary cells*.
- HCEC provide an ideal model to study cell-matrix interactions, gene regulation and tissue development, drug development, and validation of alternative methods in toxicology.
- Lifeline’s HCEC are extensively tested for quality and optimal performance.
- Lifeline guarantees performance and quality.

Normal Human Corneal Epithelial Cells are tested for:
- Cell Count
  500,000 cryopreserved cells per vial
- Proliferation and Morphology
  Normal cell appearance for 3 passages
- Cell Viability
  Minimum 70% viability when thawed from cryopreservation
- Sterility Testing
  Negative for mycoplasma
  Negative for bacterial or 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-0029</td>
<td>Normal Human Corneal Epithelial Cells, Secondary – 500,000 cells per vial</td>
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<tr>
<td>LL-0032</td>
<td>OcuLife™ Medium Complete Kit (OcuLife Basal Medium, OcuLife 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-0032</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 frozen. 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.
Lifeline’s Normal Human Corneal Epithelial Cells
Lifeline's Normal Human Corneal Epithelial Cells (HCEC), when grown in Lifeline’s OcuLife™ Medium, provide an ideal serum-free culture model for many areas of research. Common areas of study utilizing HCEC are cell-matrix interactions, gene regulation and tissue development, drug development, and validation of alternative methods in toxicology.

Lifeline’s HCEC are cryopreserved as secondary cells* to ensure the highest viability and plating efficiency. Our HCEC are quality tested in fully supplemented OcuLife Medium to ensure optimal morphology and growth over a period of at least three passages.

Lifeline’s HCEC are not exposed to antimicrobials or phenol red when cultured in OcuLife 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 OcuLife Medium Complete Kit (LL-0032) 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.