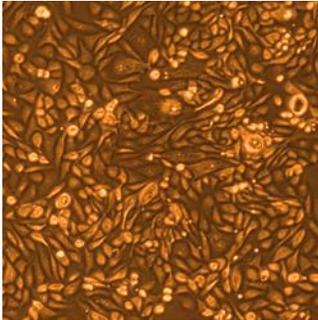


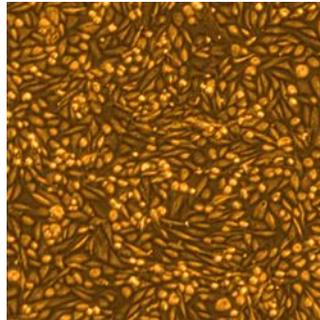
## Normal Human Renal Epithelial Cells Specification Sheet

Human Renal Cortical Epithelial Cells (HRCEC)  
Human Renal Proximal Tubule Cells (HRPTC)

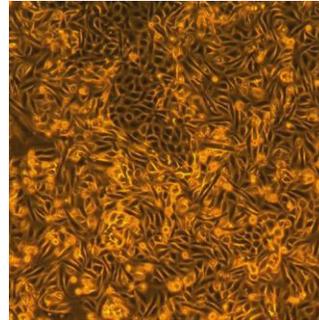
Human Renal Mixed Epithelial Cells (HRMxEC)  
Human Renal Medullary Epithelial Cells (HRMdEC)



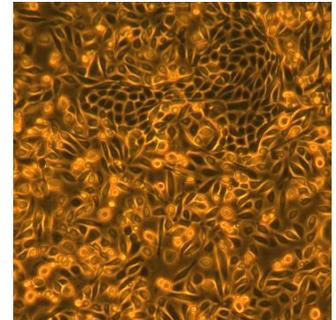
Renal Proximal Tubule



Renal Cortical Epithelial



Renal Mixed Epithelial



Renal Medullary Epithelial

CELL FEATURES:	ISOLATED FROM:	CRYOPRESERVED AT THE END OF:
<ul style="list-style-type: none"> <li>HRCEC</li> </ul>	<ul style="list-style-type: none"> <li>Cortex of Kidney</li> </ul>	<ul style="list-style-type: none"> <li>Primary Culture*</li> </ul>
<ul style="list-style-type: none"> <li>HRPTC</li> </ul>	<ul style="list-style-type: none"> <li>Cortex of Kidney</li> </ul>	<ul style="list-style-type: none"> <li>Secondary Culture*</li> </ul>
<ul style="list-style-type: none"> <li>HRMxEC</li> </ul>	<ul style="list-style-type: none"> <li>Kidney</li> </ul>	<ul style="list-style-type: none"> <li>Primary Culture*</li> </ul>
<ul style="list-style-type: none"> <li>HRMdEC</li> </ul>	<ul style="list-style-type: none"> <li>Medulla of Kidney</li> </ul>	<ul style="list-style-type: none"> <li>Primary Culture*</li> </ul>
<ul style="list-style-type: none"> <li>Renal Epithelial Cells provide ideal models for the study of renal function, metabolism, nephrotoxicity or cancer research.</li> </ul>		
<ul style="list-style-type: none"> <li>All Renal Epithelial Cell types are extensively tested for quality and optimal performance.</li> </ul>		
<ul style="list-style-type: none"> <li>Lifeline guarantees performance and quality.</li> </ul>		

NORMAL HUMAN RENAL EPITHELIAL CELLS ARE TESTED FOR:	
<ul style="list-style-type: none"> <li>Cell Count</li> </ul>	500,000 cryopreserved cells per vial
<ul style="list-style-type: none"> <li>Proliferation and Morphology</li> </ul>	Normal cell appearance for 15 population doublings
<ul style="list-style-type: none"> <li>Cell Viability</li> </ul>	Minimum 70% viability when thawed from cryopreservation
<ul style="list-style-type: none"> <li>Sterility Testing</li> </ul>	Negative for mycoplasma Negative for bacterial and fungal growth
<ul style="list-style-type: none"> <li>Virus Testing</li> </ul>	Negative for HIV-1, HIV-2, HBV, and HCV by PCR
<ul style="list-style-type: none"> <li>Specific Enzyme Test</li> </ul>	Renal Proximal Tubule cells have $\gamma$ -glutamyl transferase activity

PART NUMBER	DESCRIPTION
<a href="#">FC-0012</a>	HRCEC, Human Renal Cortical Epithelial Cells, Primary – 500,000 cells per vial
<a href="#">FC-0013</a>	HRPTC, Human Renal Proximal Tubule Epithelial Cells, Secondary – 500,000 cells per vial
<a href="#">FC-0017</a>	HRMxEC, Human Mixed Renal Epithelial Cells, Primary – 500,000 cells per vial
<a href="#">FC-0018</a>	HRMdEC, Human Renal Medullary Epithelial Cells, Primary – 500,000 cells per vial
<a href="#">LL-0025</a>	RenaLife™ Medium Complete Kit (RenaLife Basal Medium, RenaLife LifeFactors® Kit)
<a href="#">LS-1104</a>	GA Antimicrobial Supplement, 0.5 mL (Gentamicin 30 mg/mL, Amphotericin B 15 µg/mL); provided with purchase of <a href="#">LL-0025</a>

To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call technical and customer service at 877.845.7787.

## Lifeline's normal Human Renal Epithelial Cells

Lifeline's Normal Human Renal Epithelial Cells, when grown in Lifeline's RenaLife™ Medium, provide an ideal low-serum culture model for the study of renal function, metabolism, nephrotoxicity or cancer research.

Lifeline's Renal Epithelial Cells are cryopreserved as primary or secondary cells\* to ensure the highest viability and plating efficiency. Our Renal Epithelial Cells are quality tested in RenaLife Medium to ensure optimal reduced-serum growth over a period of at least 15 population doublings.

Lifeline's Renal 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 RenaLife Medium Complete Kit (LL-0025) 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](http://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.

*\*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.*

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

**Lifeline Cell Technology – 8415 Progress Drive, Suite T – Frederick, MD 21701**

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