PRODUCT DESCRIPTION

Renaissance Essential Tumor Medium™ is a cell line derivation and maintenance medium specifically formulated for the extended in vitro propagation of patient cancer cells derived from various tumor types.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>CATALOG NUMBER</th>
<th>COMPONENTS</th>
<th>PART NUMBER</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renaissance Essential Tumor Medium (RETM)</td>
<td>CM-0001</td>
<td>RETM Basal Medium</td>
<td>CM-0001-A1</td>
<td>500 mL</td>
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<td></td>
<td></td>
<td>RETM Supplement</td>
<td>CM-0001-P1</td>
<td>15 mL</td>
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PRODUCT HANDLING/DIRECTIONS FOR USE

Reconstitution:

To make RETM Complete Medium, please combine the following:

1. 500 mL RETM Basal Medium
2. 15 mL RETM Supplement (thawed in a 37°C water bath)
3. 125 µL cholera toxin (100 µg/mL stock solution in cell culture grade water) – Recommended product: EMD Millipore catalog number 227036-1MG. Final concentration: 25 ng/mL
4. 5-25 mL (1-5%) heat-inactivated fetal bovine serum (see General Guidelines) – Recommended product: HyClone™ catalog number SH3007103HI
5. Pen-strep or other antibiotics as desired

Storage & Stability:

Upon arrival, store basal medium at 4°C. Store supplement at -20°C. Medium and supplement are stable for a minimum of 3 months from date of receipt when stored as directed.
Notes & Tips:

Due to the variation in biology and quality of each tumor specimen, optimization of culture conditions is required for each new sample. These guidelines describe how to optimize the Renaissance Essential Tumor cell culture system for the derivation of cell lines from human tissue samples.

For additional support in the derivation of cell lines from primary human tumors using Renaissance Essential Tumor Medium, contact Cellaria Biosciences at 617-981-4208.

1. **Use 0.4 mL of Renaissance™ Essential Tumor Medium per cm² culture surface area.**
   Note: Limiting the culture medium volume will negatively impact culture health.

2. **Test cell attachment on different culture surfaces for each new specimen.** Note: We have found Corning® Primaria™ tissue culture vessels promote better cell line derivation than standard tissue culture treated culture vessels in some of our tumor cells, due to improved attachment and/or migration.

3. **Use medium color as an indicator to determine when to change the medium.** Replace the medium when it becomes orange to orange-yellow to replenish nutrients and maintain pH.

4. **Inhibiting Fibroblast Overgrowth: Varying the concentration of heat-inactivated fetal bovine serum in the Renaissance™ Essential Tumor Medium will control fibroblast overgrowth.** Begin new cultures with a minimal amount of heat-inactivated FBS (1%-5%). Once the cultures appear free of fibroblastic growth, test varying levels of FBS (1%-10%) to further promote the growth and expansion of the cancer cells. If fibroblast growth persists, please contact Cellaria Biosciences at support@cellariabio.com for recommendations specific to your application.

5. **Test new specimens for growth in both atmospheric oxygen (approximately 20% O2) and hypoxic (2%-5% O2) conditions if available.**

Notice to Purchaser:

This product is intended for academic research purposes only, and not intended for diagnostic or therapeutic use.