Cell Therapy Systems™

Neurobasal® CTS™ and Neurobasal®-A CTS™ Media

Description
Neurobasal® medium and Neurobasal®-A medium supplemented with B-27® Supplement support cultivation of human glioblastoma, neurons, neural stem cells, and non-CNS lineage cell types with good viability and survival. Both media support the growth of neural and non-neural cells when supplemented with B-27® Supplement, and contain anti-oxidants to reduce reactive oxygen damage and no glutamate and aspartate for study of excitatory neurotransmitters.

<table>
<thead>
<tr>
<th>Product</th>
<th>Catalog no.</th>
<th>Amount</th>
<th>Storage</th>
<th>Shelf Life*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurobasal® Medium CTS™</td>
<td>A13712-01</td>
<td>500 mL</td>
<td>2°C to 8°C, Protect From Light</td>
<td>12 months</td>
</tr>
<tr>
<td>Neurobasal®-A Medium CTS™</td>
<td>A13710-01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Shelf Life duration is determined from Date of Manufacture.

Product use
For Research Use or Non-Commercial Manufacturing of Cell-Based Products for Clinical Research. Caution: Not for direct administration into humans or animals.

Important information
- Use Neurobasal® CTS™ Medium for pre-natal cultures
- Use Neurobasal®-A CTS™ Medium for post-natal cultures

Safety information
For every chemical, read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

Prepare media
For glioblastoma or neural stem cells, Neurobasal® media must be supplemented with 0.5 to 2 mM L-glutamine or GlutaMAX™-I, and a serum-free supplement or serum prior to use. The recommended supplement for human cells is B-27® Supplement (Cat. no. 17504).

Plate cells
1. Coat autoclaved glass 12-mm diameter coverslips with 50 µg/mL poly-D-lysine in water (135 kD, Sigma) and incubate at room temperature overnight. The next day, aspirate the poly-D-lysine solution, rinse the coverslips once with water, and allow them to dry for one hour.
2. Plate human or hESC-derived cells at the desired concentration (i.e., 90–320 cells/mm²) on the poly-D-lysine coated coverslips in 60–150 µL Neurobasal®-A/B-27® Supplement (post-natal) or Neurobasal®/B-27® Supplement (pre-natal).
3. One hour after plating and incubating the cells (ambient oxygen with 5% CO₂ is acceptable but 9% oxygen with 5% CO₂ is preferable), quickly pick up the coverslips, allow them to drain, and transfer the cells to 0.4 mL of Neurobasal®-A/B-27® Supplement in a 24-well plate at 37°C. For post-natal neurons, aspirate the medium, rinse the coverslips once with warm Neurobasal®-A medium and refeed the cells with Neurobasal®-A medium supplemented with B-27® Supplement, 0.5 mM L-glutamine, 1% penicillin-streptomycin (Cat. no. 15070) and 5 ng/mL FGF-basic CTS™ (Cat. no. CTP0261).
4. When culturing the cells for longer than 4 days, remove one-half of the medium on day 3 or 4 and replace it with an equal volume of medium containing 10 ng/mL FGF-basic (post-natal neurons). For pre-natal neurons, perform subsequent medium changes (day 4) using Neurobasal® medium without glutamate to reduce glutamate toxicity in the culture. With neuroblastomas, the glutamate should be included in the medium for both plating and subsequent media changes.

Related products

<table>
<thead>
<tr>
<th>Product</th>
<th>Catalog no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dulbecco’s Phosphate Buffered Saline CTS™ [DPBS] (1X), liquid, contains no calcium, magnesium, or phenol red</td>
<td>A12856</td>
</tr>
<tr>
<td>CELLstart™ CTS™</td>
<td>A10142</td>
</tr>
<tr>
<td>GlutaMAX™-I CTS™</td>
<td>A12860</td>
</tr>
<tr>
<td>TrypLE™ Select CTS™</td>
<td>A12859</td>
</tr>
<tr>
<td>FGF-basic Full Length CTS™ Recombinant Human</td>
<td>CTP0261</td>
</tr>
<tr>
<td>B-27® Supplement, XenoFree CTS™</td>
<td>A14867</td>
</tr>
<tr>
<td>Penicillin-Streptomycin</td>
<td>15070</td>
</tr>
</tbody>
</table>

Explanation of symbols and warnings
The symbols present on the product label are explained below:

Use By: Batch code Keep away from light Temperature Limitation

Catalog number Consult instructions for use Caution, consult accompanying documents Sterilized using aseptic processing techniques

Limited product warranty
Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies’ General Terms and Conditions of Sale found on Life Technologies’ website at www.lifetechnologies.com/termsandconditions. If you have any questions, please contact Life Technologies at www.lifetechnologies.com/support.
Important licensing information
These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

References


