Primocin™

For prevention of mycoplasma, bacterial and fungal contamination in primary cell cultures

Product information

Content

Primocin™ is supplied as either 10 x 1 ml tubes, or 1 x 20 ml bottle of a 50 mg/ml clear aqueous solution, filtered to sterility, and validated for cell culture usage.

Primocin™ is ready-to-use, one 1 ml vial is sufficient for 500 ml of culture medium. One 20 ml bottle will treat 10 L of culture medium.

VZA-1021*: 10 x 1 ml at 50 mg/ml (500 mg)
VZA-1022*: 1 x 20 ml at 50 mg/ml (1 g)

* For research use only.

Shipping and storage

Primocin™ is shipped at room temperature and should be stored at 4°C for immediate use, or -20°C for long term storage. Primocin™ is stable one month at room temperature and 12 months at -20°C.

Quality control

Activity of Primocin™ is rigorously controlled by physicochemical and microbiological assays.

Special handling

Primocin™ may be a hazardous compound:
avoid contact with skin, harmful if swallowed.

General product use

Primary cells are highly susceptible to contaminations either from the host animal or during the dissection process. Primocin™ has been specifically developed for use as a supplement to primary culture media that will offer complete protection against microbial contaminants.
**Description/properties**

Primocin™ is a new antibiotic formulation specifically designed to protect primary cells. It is a combination of antibacterial and antifungal compounds active to eliminate mycoplasma, Gram+ and Gram- bacteria and fungi by blocking both DNA and protein synthesis. The antifungal agent in Primocin™ is more stable and less toxic than Amphotericin B.

**Cell viability**

Primocin™ is non-toxic to primary cells. It acts on targets only found in micro-organisms. The bacterial targets are DNA gyrase and the prokaryotic 30S and 50S ribosomal subunits. The fungal target is ergosterol, a molecule only found in the cell membrane of fungi and yeasts.

**Method**

For primary cell culture maintenance, Primocin™ is used at a concentration of 100 µg/ml, which represents a 1:500 dilution of stock solution. Refer to the table below to determine the quantity of Primocin™ needed.

<table>
<thead>
<tr>
<th>medium format</th>
<th>35 mm plate</th>
<th>60 mm plate</th>
<th>100 mm plate</th>
<th>100 ml flask</th>
<th>500 ml bottle</th>
</tr>
</thead>
<tbody>
<tr>
<td>medium volume</td>
<td>2 ml</td>
<td>5 ml</td>
<td>10 ml</td>
<td>100 ml</td>
<td>500 ml</td>
</tr>
<tr>
<td>Primocin™ format</td>
<td>4 µl</td>
<td>10 µl</td>
<td>20 µl</td>
<td>200 µl</td>
<td>1 ml</td>
</tr>
</tbody>
</table>

1. Split an actively dividing culture of cells into cell culture medium containing 100 µg/ml of Primocin™.
2. Remove and replace by fresh Primocin™ containing medium every 3-4 days.
3. Repeat every time you change culture medium.