Normocin™

For prevention of mycoplasma, bacterial and fungal contamination in mammalian lines

Product information

Content

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

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

VZA-1001*: 10 x 1 ml at 50 mg/ml (500 mg)
VZA-1002*: 1 x 20 ml at 50 mg/ml (1 g)

* For research use only.

Shipping and storage

Normocin™ is shipped at room temperature and should be stored at 4°C for immediate use, or -20°C for long term storage.
Normocin™ is stable one month at room temperature and 18 months at -20°C.

Quality control

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

Special handling

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

General product use

Normocin™ is used as a ‘routine addition’ to cell culture media to prevent mycoplasma, bacterial and fungal contaminations in small or large scale cell cultures.
Normocin™ can be used in combination with Pen/Strep solutions to broaden the anti-bacterial spectrum.
**Description/properties**

**Normocin™** is an innovative formulation of three antibiotics active against mycoplasma and fungi. It displays very efficient anti-mycoplasma action, eliminates basal resistance, and is active on a broader spectrum of bacteria than current Pen/Strep preparations.

**Normocin™** kills free mycoplasma before they can infect the cells. In comparison with other antibiotics commonly used, **Normocin™** is truly bactericidal and not simply bacteriostatic.

Current commercial antibacterial agents display selective toxicity against either Gram+ or Gram- bacteria, whereas both antibacterial components of **Normocin™** are active against both Gram+ and Gram- bacteria and mycoplasma. The antimycotic agent in **Normocin™** is more stable and less toxic than Amphotericin B. The active concentration of **Normocin™**, 100 µg/ml, displays no toxicity to the cell line being treated. Two compounds of **Normocin™** act on mycoplasma and both Gram+ and Gram- bacteria, one by binding to the 50s subunit of ribosomes halting protein synthesis, the other by interfering with DNA synthesis. The third compound eradicates yeast and fungi by disrupting ionic exchange through the cell membrane.

**Cell toxicity**

To date, no data on toxicity of **Normocin™** to cell lines being treated with the recommended concentration have been reported. At a concentration of 500 µg/ml, some cytotoxicity may be observed.
**Method**

For cell culture maintenance, Normocin 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 Normocin™ 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>Normocin™ 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 medium containing 100µg/ml of Normocin™.
2. Remove and replace by fresh Normocin™ containing cell culture medium every 3-4 days.
3. Repeat every time you change culture medium.