

**Nanomycopultine ® Concentrate 20x**  
 Bacterial Protection and Decontamination Reagent

*An innovative method for fast and efficient protection and elimination of bacterial contamination from cell cultures*

**CAT N°:** LM-A4116

**Storage conditions:** -20°C

**Shelf life:** 24 months

**Composition:** Displayed on website; also available on request

**Colour:** Colourless

**pH:** 5.0 ± 1

**Osmolality:** Not applicable

**Endotoxin:** < 10 EU/ml

**Sterility tests:**

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Cell Growth test:** Not applicable

**Other tests:**

- Solution Stability:  
Stable at +2°C to +8°C for 2 weeks and 24 months as concentrate at -20°C
- Stability:  
Stable at +2°C to +8°C for 2 weeks and 24 months as concentrate at -20°C

**Recommended use:**

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

The product is intended to be used in vitro for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

**Application:**

**Nanomycopulitine®** can be used *in vitro* to clean already contaminated cell cultures and to prevent recontamination during further cultivation. Curing of *Mycoplasma* infected cell lines is one of the most important applications of this innovative agent. Another useful **Nanomycopulitine®** application is media protection against contamination if sterile filtration is not appropriate.

**Uses:**

Continuous use of sterile cell culture equipment, media and cells, leads to long term microbial contamination risk. A number of research and industrial applications involve antibiotics or toxins to reduce this risk. Applications where non-sterile cells were taken into cell culture are dependent of supplements suppressing contaminants. There are also circumstances where physical contaminant removal is inappropriate because filtration compromises the component viability or activity.

The toxin includes different required advantages for a suitable application in routine cell culture:

- The **Nanomycopulitine®** preferably eliminates bacteria.
- It is active and kills bacteria in both, logarithmic and stationary growing life cycle phases.
- The toxin does not affect the normal metabolism or enzymatic function.
- The solutions do not contain excipients or buffer which influence the growth negatively.
- The toxin is stable in liquid form under normal storage conditions and also in cell culture to provide a protection over a period of time
- **Nanomycopulitine®** has a wide spectrum of activity against gram negative and gram positive bacteria and also others like Chlamydia, Mycobacteria, a broad range of Mycoplasma, Nanobacteria and bacteria L-forms.
- It is non toxic and safe with respect to human handling

**Procedure**

- This test is designed for 1 ml concentrated **Nanomycopulitine®** 20X concentrated solution
- Use a 24 well plate
- Biowest recommends to prepare the **Nanomycopulitine®** with a 1/20 as dilution in your regular cell culture medium (It could be 1/15, 1/25 or 1/30 depending on the cell type)
- Resuspend  $5 \times 10^4$  cells in 1 ml of the selected dilution
- Seed the cells and grow them for several days
- Check growth and morphology to compare them with your control culture

**Notice:** *In between Nanomycopulitinal treatments, there should be cultivation without the addition of **Nanomycopulitine®** to avoid resistant bacterial forms.*

**Signs of Deterioration:** Not applicable

**Remarks:**

Reference

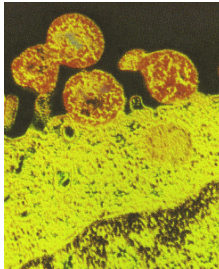
- Kontaminationen der Zellkultur I und II, Laborjournal Biotech Europe N° 7-8 2003 Sabine PILS

<http://www.biotech-europe.de/rubric/methoden/methoden/v27.html>

<http://www.biotech-europe.de/rubric/methoden/methoden/v29.html>

Cell Culture contaminants

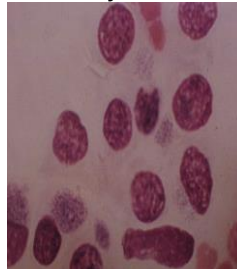
Mycoplasma



Mycobacteria



Chlamydia



Nanobacteria

