Technical Data Sheet

Bacterial Protection and Decontamination Reagent Nanomycopulitine

Cat No : LM-A4116

1. Intended use

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 protection over a period of time
- Nanomycopulitine® has a wide spectrum of activity against gram negative and gram positive bacteria nd 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

2. 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.

3. Procedure

- This test is designed for 1 ml concentrated Nanomycopulitine® 20X concentrated solution
- Use a 24 well plate
- 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 x 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 devoid resistant bacterial forms.

4. Sterility

Filter sterilized by 0.2 µm

5. Solution Stability

Stable at 4°C for 2 weeks and 24 months as concentrate at –20°C

6. 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

7. Cell Culture contaminants

Mycoplasma Mycobacteria Chlamydia, Nanobacteria