

## Product Information

### LookOut® Mycoplasma Elimination Kit

Catalog Number **MP0030**

Storage Temperature 2–8 °C

## TECHNICAL BULLETIN

### Product Description

The LookOut® Mycoplasma Elimination Kit has been developed to quickly and efficiently eliminate mycoplasma contamination from cell cultures. The potential effects of mycoplasma contamination in biological products are of major concern in research, diagnostics, and biotechnological environments. The effects of mycoplasma are decreased quantity of product produced, decreased quality of the product, and lack of consistency and reproducibility. Current methods for the inactivation or elimination of mycoplasma in cell cultures are antibiotic-based. Antibiotic therapies do not always result in successful elimination of contaminants. Moreover antibiotics exhibit cytotoxic properties in that they are capable of modifying the metabolism of eukaryotic cells and they promote the development of resistant mycoplasma strains.

The LookOut Mycoplasma Elimination Kit is a combination of biological agents that reliably and completely eliminate mycoplasma contamination. The initial treatment of this eradication procedure is adequate for mycoplasma elimination in most applications. The second step suppresses and inactivates any remaining mycoplasma using a follow-up antibiotic treatment. The cytotoxic properties of the reagents are minimal and the development of resistant strains is highly unlikely, due to the drastically reduced mycoplasma concentration after the initial treatment. In comparison to other products for the elimination, inactivation, or suppression of mycoplasma, the LookOut Mycoplasma Elimination Kit is more effective and has not been shown to cause any changes in normal cell characteristics. It is the least cytotoxic method (overall cytotoxicity demonstrated <20% over a diverse groups of cell lines).

The LookOut Mycoplasma Elimination Kit is suitable for the elimination of *Mollicutes* and related organisms (*Mycoplasma*, *Acholeplasma*, *Spiroplasma*, and *Entomoplasma*) in cell and virus cultures. It is not effective for treating mycoplasma contamination in *Chlamydia* cultures.

### Components

Mycoplasma Elimination Reagent - Initial Treatment,  
Catalog Number M4569 1 vial  
(vial contains 500 µl)

Mycoplasma Elimination Reagent - Final Treatment,  
Catalog Number M4444 3 vials  
(each vial contains 500 µl)

### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

The kit components are shipped at ambient temperature and storage at 2–8 °C with protection from light is recommended. When stored properly the kit is stable until the expiration date stated on the label.

**Procedure**

1. Transfer 4.5 ml of prewarmed medium (37 °C) to a cell culture flask or dish.
2. Add the vial contents (500 µl) of the Mycoplasma Elimination Reagent - Initial Treatment to the medium. Mix carefully.
3. Split and passage the cells as thinly as possible given the nature of the cell line.
  - a. Add 5 ml of cell suspension to medium/elimination reagent mixture.
  - b. Avoid cell aggregates. Use single cell suspension during treatment. Confirm microscopically. Trypsinize or triturate as necessary.
  - c. FBS concentration of 5% (v/v) is recommended.
4. Grow cells until 80–90% confluent.
5. Passage cells at usual rate. Add the contents of one vial (500 µl) of Mycoplasma Elimination Reagent - Final Treatment to 9.5 ml of passaged cells in fresh medium. Resume routine FBS concentration.
6. Repeat Final Treatment (step 5) through two additional passages. At this time cultures are mycoplasma free.

**Related Products**

LookOut Mycoplasma PCR Detection Kit,  
Catalog Number MP0035  
LookOut DNA Erase (Spray for surface cleaning),  
Catalog Number L8917  
LookOut DNA Erase Refill,  
Catalog Number L9042

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