



Mycoplasma Inhibitor Solution (MIS)

Catalog #0563

Product Description

Mycoplasma inhibitor solution is formulated with 10mg/ml ciprofloxacin. Ciprofloxacin belongs to the fluoroquinolone antibiotic family and is effective against mycoplasma, gram positive and gram negative bacteria [1, 2]. Ciprofloxacin inhibits bacterial DNA gyrase necessary for active and non-active growth phases [3].

Add fresh mycoplasma inhibitor solution to culture media and change every 3-4 days. A two week treatment should be sufficient to eliminate contamination. The effective working concentration ranges from 5-25 $\mu\text{g/ml}$; 10 $\mu\text{g/ml}$ is ideal for most applications. The optimal concentration, however, should be determined for individual cell types and culture conditions.

Product Use

MIS is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.

Storage

Store at -20°C .

Shipping

Dry ice.

References

- [1] Schmitt K, Daubener W, Bitter-Suermann D, and Hadding U. (1988) "A safe and efficient method for elimination of cell culture mycoplasmas using ciprofloxacin". *J Immunol Methods* 109: 17-25.
- [2] Drexler HG and Uphoff CC. (2002) "Mycoplasma contamination of cell cultures: Incidence, sources, effects, detection, elimination, prevention". *Cytotechnology* 39: 75-90.
- [3] Drlica K and Zhao X. (1997) "DNA gyrase, topoisomerase IV, and the 4-Quinolones". *Microbiol Mol Biol Rev* 61: 377-392.

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.