Instructions for Use

BIOMYC™

Antibiotic Solutions for Mycoplasma Treatment

2729634-000

SARTORIUS

Antibiotic Solutions for Mycoplasma Treatment

	BIOMYC™-1 (100 × Conc.)	BIOMYC™-2 (100 × Conc.)	BIOMYC™-3 (100 × Conc.)
REF	03-036-1D, 10 mL	03-037-1D, 10 mL	03-038-1D, 10 mL
	03-036-1C, 20 mL	03-037-1C, 20 mL	03-038-1C, 20 mL
	03-036-1B, 100 mL	03-037-1B, 100 mL	03-038-1B, 100 mL
	Store at -20 to -10°C		

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1 Product Description

The contamination of cells with mycoplasma is a very common problem, even though it often goes unnoticed since no cloudiness appears in the cell culture. Nevertheless the contamination often causes biochemical changes as well as changes in the immunological properties of the cells. Since mycoplasma-infected cells cannot always be discarded, many complicated methods have been suggested for the elimination of the mycoplasma.
We are offering a combination of antibiotics, which have been shown to be effective in the elimination of mycoplasma species that account for 90% of the contamination found in cell cultures. When used according to the following instructions, no cytotoxic effects will occur.

2 BIOMYC™-1 & BIOMYC™-2

BIOMYC™-1 is based on the antibiotic tiamutin, which is produced by the fungus pleurotus mutilus. BIOMYC™-2 is based on minocycline, which is a tetracycline derivative. These two antibiotic solutions are generally used sequentially in combination.

Instructions for Use

1. Defrost at 2 – 8°C or at RT. If required, aliquot and freeze again for a later use.
2. Do not use the two solutions together, but rather sequentially.
3. Add 1 mL BIOMYC™-1 to 100 mL medium, and maintain the contaminated cells in this mixture for 4 days. Any fresh medium added should also contain BIOMYC™-1.
4. After 4 days, add 1 mL BIOMYC™-2 to 100 mL fresh medium, and maintain the cells in this second mixture for 3 days.
5. The above, together, are considered as one treatment cycle. It may be necessary to repeat this cycle 2 – 3 times.
6. During the process, the cells can be tested for mycoplasma contamination, and results can then be used to shorten the process when possible.

3 BIOMYC™-3

BIOMYC™-3 is based on the ciprofloxacin antibiotic, which is a member of the fluoroquinolone group. Many mycoplasma species have been found to be sensitive to BIOMYC™-3, including A.laidlawii, M.orale, M.hyorhinis, M.fermentans, and M.arginini. These species are responsible for most of the contamination in cell culture. At the concentrations recommended for use, no cytotoxic effects have been found, and the treatment is easy to perform.

Instructions for Use

1. Defrost at 2 – 8°C or at RT. If required, aliquot and freeze again for a later use.
2. Add 1 mL BIOMYC™-3 to 100 mL medium.
3. Continue the treatment for a total of 14 days, while changing the medium (containing BIOMYC™-3) every 2 – 3 days.
4. Retain the cells in the growth medium for an additional 14 days before re-testing for mycoplasma.

4 Reference

Schmitt, K. et al., J. Immunol. Methods, 109:17-25 (1988)

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The information and figures contained in these instructions correspond to the version date specified below.
Sartorius reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.
Masculine or feminine forms are used to facilitate legibility in these instructions and always simultaneously denote the other gender as well.

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