Anti-Mycoplasma Treatment Reagent

Cat. No: P-CMR-001

Size: 1mL / 1mL×5

General Information

Product Form	Liquid
Storage	-20°C, shading light. Avoid repeated freeze-thaw.
Shipping	Ice bag or dry ice
Expiration date	12 months

Background

Mycoplasmas are a class of minimal prokaryotic microorganisms that lack cell wall, exhibit high pleomorphism, can pass through bacterial filters, and can proliferate in artificial culture media. Due to their ability to form filamentous and branching shapes, they are referred to as mycoplasmas.
In cell culture, mycoplasma contamination is a prevalent and often underestimated issue. Once it occurs, it can lead to a variety of adverse outcomes, including but not limited to fluctuations in cell growth rates, changes in cell morphology, alterations in cell membrane antigenicity, changes in cellular metabolism, and decreased cell viability after resuscitation. These alterations ultimately impact the reliability of experimental results. Hence, taking effective measures for the prevention and eradication of mycoplasma contamination is critically important.
The main sources of mycoplasma contamination in cell culture include:
1) Cross-contamination between cells;
2) Contamination from the oral and skin of cell culture operators;
3) Contamination from the working environment or experimental equipment;
4) Poor aseptic techniques by experimenters;
5) Introduction of contamination from components used in cell culture, such as serum, culture media, etc.;
6) Contamination from the original tissues or organs used for cell preparation.

Anti-Mycoplasma Treatment Reagent is a mixed solution developed by the research team of Pricella based on our Biomocin product. It contains specialized components that are effective against mycoplasmas, functioning by inhibiting the replication of mycoplasmal DNA and synthesis of essential proteins for their growth, thereby achieving efficient elimination of mycoplasmas. This product has undergone testing on dozens of different cell types, combined with long-term feedback from customers, it has been convincingly demonstrated that it does not cause any harm to cells themselves. Moreover, it stands out in its exceptional performance for eliminating mycoplasma contamination in cell cultures. Not only does it effectively suppress the proliferation of mycoplasmas, but it also clears mycoplasmas already present within cell culture systems. As a result, this product can successfully rescue valuable contaminated cell resources and mitigate research losses caused by mycoplasma contamination.

Instructions for use

1. According to the characteristics of the cultured cells, the anti-mycoplasma treatment reagent is added to the corresponding complete culture medium. Prepare the fresh medium before use.
2. Recommended dilution ratio is 1:200. For example, add 50 µL of anti-mycoplasma treatment reagent to 10 mL of complete culture medium.
3. Discard the medium of cultured cells, wash the cells with sterile PBS solution, the add prepared fresh complete culture medium with anti-mycoplasma treatment reagent. Once a day for 3 consecutive days or once every 2 days for six days. If the cell contamination is very serious, the treatment time can be extended appropriately.
4. The obvious effect can be seen after 3 days of continuous use. Mycoplasma detection kit can be used for detection after 15 days of treatment. If there is still residual mycoplasma, it can be used for another 6 days.
5. Since mycoplasma may be present in the environment, routine detection of mycoplasma should be conducted every other month to avoid re-contamination of the cells.

Notes

1. This product is for research use only.
2. This product is sterilized by 0.22 µ m filtration.
3. It is necessary to pay attention to the aseptic operation and avoid the pollution during the culture.
4. Store the reagent at -5~-20°C with shading light and avoid repeated freeze-thaw. If the reagent is stored at 2-8°C with shading light, please use it within 2 weeks.
5. Anti-mycoplasma treatment reagent is yellow-green. Long periods of light will cause the reagent to failure. Do not use when the color changes to grayish green or dark brown.

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