

## Mycoplasma Prophylaxis

**Cat:** CA1100

**Size:** 500 $\mu$ L/500 $\mu$ L\*4

**Storage:** -20°C, valid for 1 year (avoid repeated freezing and thawing, it is recommended to store in separate packages.)

### Product description:

Mycoplasma is a size of only 0.2~0.3 $\mu$ m, no cell wall, can pass through the general filter membrane (0.22~0.45 $\mu$ m) prokaryotes, in the process of cell culture, mycoplasma infection rate can reach 63%, so the cell culture process by mycoplasma pollution is a worldwide problem. Multiple literature studies have shown that when the cells (especially the passage cells) are contaminated by mycoplasma, the expression of DNA, RNA and protein in the cells is changed, and the growth rate of the cells is generally not significantly affected, so the cell is generally difficult to detect mycoplasma pollution. Mycoplasma prophylactic agent is a polypeptide inhibitor, which can effectively prevent mycoplasma pollution and will not lead to cell resistance. With the extension of culture time, it will be slowly degraded into amino acids, without secondary pollution, and can be used in large-scale fermentation, cell therapy and other fields. At the same time, mycoplasma prophylactic agent has a broad spectrum, can replace double antibodies, used to prevent the pollution of common bacteria; It has low cytotoxicity and has been verified on a variety of cells.

**Principle:** This product can effectively prevent and kill the mycoplasma and common bacteria outside the cell, but also can enter the cell, effectively prevent the mycoplasma pollution in the cell, so that the cell completely get rid of the trouble of mycoplasma pollution, to ensure the credibility of the experimental results of researchers.

### Protocols:

1. It is recommended to use now.
2. The use of mycoplasma prophylactic treatment, it is recommended to maintain the cell density of 50-60%.
3. The recommended dilution ratio of mycoplasma prophylaxis is 1:2000, such as: 20mL medium added 10 $\mu$ L of mycoplasma prophylaxis.
4. According to the cell cycle is not the same, it is recommended to treat once every 2-4 days, or long-term treatment, to prevent mycoplasma pollution.
5. Can be directly added to the serum, medium, for the prevention of mycoplasma pollution.

### Notes:

1. Packaging storage, be sure to use now.
2. This product should not be mixed with other antibiotics except for the double resistance of cyanomycin.
3. Because this product is a protein product, if some cells are sensitive to this product, it is recommended to use this product for 2 days, and then change to the medium without this product

for 1-2 days.

4. Please centrifuge the reagent tube instantaneously after receiving the product.

5. The product precipitation is normal phenomenon, before packaging or use must be dissolved at room temperature shock to clear transparent, does not affect the use of the product effect.

**Note:** This product can remove most kinds of mycoplasma, but non-toxic to the cell itself, has been verified on hundreds of cells, such as: Mouse embryonic stem cells or iPS cells, human embryonic stem cells or iPS cells, HEK293, Hela, HEpG2, HCT116, COS-7, Vero, Huh-7, MDCK, PANC-1, SW620, U2OS, MCF-7, MRC-5, NIH-3T3, CCC-ESF, CHO-S, CHO-K1, CHO-DG44, H295R, HL60, K562, MDA-MB-231, SP20, T47D, BM and BV2, etc.