

BM-Cyclin

1 Contents

Components	HY-K1059-7.5 mg	HY-K1059-37.5 mg
BM-Cyclin-1	5 mg	25 mg
BM-Cyclin-2	2.5 mg	12.5 mg

2 Introduction

Mycoplasma is the smallest prokaryotic microorganism that has been discovered. Mycoplasma contamination is present in more than 70% of cell cultures, seriously altering cell function and gene expression, and even affecting the normal growth of cells.

MCE BM-Cyclin mainly contains Tiamulin fumarate and Minocycline hydrochloride, both of which prevent protein synthesis. This product can effectively inhibit and remove mycoplasma contamination widespread in cell cultures, including *Mycoplasma orale*, *Mycoplasma arginine* and *Mycoplasma hyorhinis*, without affecting cell status, thus saving some precious cells. This product is also effective against some common bacteria.

3 General Protocol

1. Dissolve 5 mg of BM-Cyclin-1 and 2.5 mg of BM-Cyclin-2 in 2 mL of sterile PBS or sterile ddH₂O respectively, to obtain two 250× stock solutions. The concentration of BM-Cyclin-1 stock solution is 2.5 mg/mL, and the concentration of BM-Cyclin-2 stock solution is 1.25 mg/mL.

Note: a. The working concentration of BM-Cyclin-1 is 10 µg/mL, and the working concentration of BM-Cyclin-2 is 5 µg/mL. (For example, add 4 µL of BM-Cyclin-1 stock solution to 1 mL of medium, the final concentration is 10 µg/mL).

b. These concentrations do not affect the growth of most cells. For sensitive cell lines, lower concentrations may be used.

2. Discard the medium in the cells to be processed, add new medium containing 10 µg/mL of BM-Cyclin-1, and incubate for 3 days.
3. Discard the medium containing BM-Cyclin-1, add new medium containing 5 µg/mL of BM-Cyclin-2, and incubate for 4 days.
4. Repeat the cycle twice.
5. Check for mycoplasma contamination with a DNA fluorescent stain such as DAPI (HY-D0814, not provided in this kit).

4 Storage

Powder: -20°C 3 years

Stock solution: -20°C 6 months

5 Precautions

1. It is recommended to halve the working concentration and perform three cycles for some sensitive cells.
2. If mycoplasma is not completely eliminated after two cycles, it is recommended to increase the working concentration by 50% and then perform another cycle.
3. Please use BM-Cyclin-1 and BM-Cyclin-2 in order.
4. It is not recommended to combine with other antibiotics.
5. To avoid repetitive freeze-thaw cycles, it is recommended to aliquot the stock solution before diluting.
6. Avoid operating with normal cells, so as not to cause cross contamination.
7. This product is for R&D use only, not for drug, household, or other uses.
8. For your safety and health, please wear a lab coat and disposable gloves to operate.