

Mycoplasma Detection Kit (PCR)

Cat: CA1081

Size: 20T/50T

Storage: -20°C, valid for 1 year

Product description:

Mycoplasma is the smallest and simplest of the prokaryotes. Mycoplasma contamination may seriously affect the state of cells, causing changes in gene expression and metabolic characteristics of cells, resulting in slower cell growth, abnormal differentiation and death, and seriously affecting cell function. These influencing factors will seriously affect the reliability, repeatability and consistency of experimental results, so the detection of mycoplasma contamination is very important.

Mycoplasma detection kit (PCR method) uses a pair of mycoplasma-specific primers for PCR amplification of mycoplasma genomic DNA of the sample, followed by agarose gel electrophoresis to detect the PCR product. The kit also contains an internal reference to monitor the normal amplification of the PCR.

This product is a broad spectrum mycoplasma detection kit, which can detect a variety of mycoplasma with high sensitivity and high specificity, and can identify the common mycoplasma that has been found so far. It can be used for the detection of mycoplasma in various biological samples, such as supernatant of cell culture, blood, saliva, urine, nasal secretions, etc.

Protocols:

1. For the sample to be tested, take 5μL supernatant as the template (the suspended cells need to be centrifuged at 1000rpm for 4min).
2. PCR system configuration:

Component	Volume
ddH ₂ O	18μL
Master Mix	27μL
Template/Positive Control	5μL

3. PCR program Settings:

Step	Temperature	Time	Cycles
Initial Denaturation	95 °C	3min	1
Denaturation	94 °C	25sec	35-40
Annealing	58 °C	25sec	
Extension	72 °C	30sec	
Final extension	72 °C	5min	1
Hold	4-16°C	Forever	

4. Gel electrophoresis: Take 10μL PCR product, use 1% agarose gel for electrophoretic detection.

5. Result analysis: The experiment confirmed the mycoplasma contamination of the sample by comparing with the negative control and positive control test results, and the positive strip size was about 500bp. If there are bands in the negative control test results, it is very likely that there is contamination in the PCR system, it is recommended to re-confirm the results.

Features:

1. High specificity: This product through specific amplification of mycoplasma DNA fragments, can identify all the mycoplasma has been found, is a broad spectrum mycoplasma detection kit.
2. Wide range of application: It can be applied to cell culture supernatant, blood samples, saliva, urine, nasal secretions, etc.
3. fast and convenient: easy to use, the same day to get results.

Notes:

1. This kit can detect M. Orale, M. Arginini, M. Boovis, M. Fermentans, M. Galisepticum, M. ominis, M. Perum, Ureaplasma spp, M. yorhinitis, M. neumoniae, A. Lydlawii and other common mycoplasma contamination.
2. All reagents should be thoroughly thawed and mixed on ice before use and stored at -20°C after use.
3. For your health and safety, please wear a lab coat and disposable gloves for operation.
4. In order to ensure the reliability and stability of the cell experiment, it is recommended to carry out mycoplasma contamination detection regularly.
5. This product is only for scientific research purposes, can not be used for diagnosis, treatment, clinical family and other purposes.