Mycoplasma DNA Detection Kit

Mycoplasma DNA Detection Kit is designed to detect Mycoplasma DNA in biological products during production.

Catalog number: ARG8104

Package: 100 tests

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INTRODUCTION

Mycoplasma DNA Detection Kit is designed for the detection of mycoplasma contamination in master cell bank, working cell bank, cells for clinical use and biological products. Mycoplasma DNA Detection Kit conforms to relevant regulations about mycoplasma testing in EP2.6.7 and JP XVI.

Mycoplasma DNA Detection Kit adopts the qPCR-fluorescent probe method. The kit is a rapid, specific and reliable device and can finish the detection within 2 hours.

PRINCIPLE OF THE ASSAY

Mycoplasma DNA Detection Kit is a test kit that uses quantitative polymerase chain reaction (qPCR) technology to detect Mycoplasma DNA.

Mycoplasma DNA Detection Kit includes a set of primers and probes that can amplify and detect specific sequences of Mycoplasma DNA. qPCR is a PCR technique that simultaneously amplifies and detects DNA by monitoring the accumulation of product with the use of a fluorescent dye. This kit has high specificity and sensitivity, is easy to use, and suitable in laboratories.

MATERIALS PROVIDED & STORAGE INFORMATION

Store the unopened kit at -20 °C. Use the kit before expiration date.

Component	Quantity	Storage information
Mycoplasma Primer & probe mix	400 µl	-20°C (protect from light)
Assay Buffer	2 X 750 µl	-20°C (protect from light)
Internal Control	2 x 1 ml	-20°C (protect from light)
Positive template	1 ml	-20°C
Mycoplasma free water	2 x 1 ml	-20°C

MATERIALS REQUIRED BUT NOT PROVIDED

- PCR machine
- Pipettes and pipette tips
- DNase/RNase-Free Water
- PCR tube

TECHNICAL HINTS AND PRECAUTIONS

- Wear protective gloves, clothing, eye, and face protection especially while handling blood or body fluid samples.
- Store the kit at -20°C at all times.
- All reagents must be kept on ice during the entire experiment.
- Once the assay has been started, all steps should be completed without interruption.
- It is highly recommended that the standards and samples be assayed in triplicates.
- Change pipette tips between the addition of different reagent or samples.

ASSAY PROCEDURE

1 Prepare qPCR mix buffer:

Assay Buffer I	15µl
Mycoplasma Primer and probe mix	4µl
Internal Control	1µl
Total	**20µl (1 wells)**

2 FAM is the channel for detecting the Mycoplasma Sample; HEX serves as channel for detecting the Internal Control.

3 Mix 20µl qPCR mix buffer with 10µl Positive /Negative / Sample in PCR tube. The final volume should be 30 µl.

4 Initial denaturation: 95°C, 2 min

5 PCR cycle:

Denaturation: 95°C, 5 sec

Elongation: 60°C, 35 sec, for **48 cycle, 30 µl.**

CALCULATION OF RESULTS

	FAM signal	HEX signal	Result
Negative	CT >40	CT < 40	Negative
Positive	CT < 40	CT < 40	Positive
Sample	CT >40	CT < 40	Negative
		CT >40	Sample fail
	CT < 40	CT < 40	Positive
		CT >40	Sample fail

If the result is sample fail, please re-prepared sample and test again.