DESCRIPTION

Mycoplasma is a term used to denote any species included in the class Mollicutes. Mycoplasma are common contaminants of eukaryotic cell cultures and are known to alter the phenotypic characteristics of host cell line. The published incidence of mycoplasma infected cell cultures has ranged from 4-92%. The small size of mycoplasma allows them to pass through 0.45 μm filters. Therefore, the mycoplasma contamination detection is very crucial for cell culture in reach labs and industry companies.

The Tribioscience Mycoplasma Detection qPCR Kit is designed to specifically detect potential mycoplasma contamination in cell cultures with probe-based real-time PCR technology. The amplified product is detected using target-specific fluorescent probes that bind to the amplified product. As the PCR product accumulates, there is an increased fluorescent signal from the bound probes. Monitoring the fluorescence intensities during the PCR run allows the detection of the accumulating PCR product in real time.

The mycoplasma detection qPCR Kit include internal controls (Positive and Negative), 2x qPCR super mix. These aids in the straightforward interpretation of the results.

APPLICATIONS

Detect Aspergillosis-derived DNA in plant, cannabis, grain, food and animal feed.

KIT CONTENTS

Name	Volume
Tribo™ 2x qPCP Super Mix	1.0 mL
Primer-probe Mix	1 x 100 μL
Positive Control DNA	20 μL
Negative Control DNA	20 μL

Sufficient reagent for 100 x 20μL
The Probe is labeled with FAM fluorescence.

STORAGE CONDITIONS

The kit is shipped on ice and stored at -20°C for long-term storage. Shelf life of 12 months after receipt.

For research use only.

KEY FEATURES

❖ Highly sensitive and specific for mycoplasma. species.
❖ High efficiency: the optimal buffer condition and specific engineered Taq DNA polymerase have increased the efficiency of PCR amplifications.
❖ Streamlined protocol: Just add DNA Template, and water.
❖ No cross reactivity with other species.

PCR PROTOCOL

1. Set up PCR reaction for each sample in 20 μL

Reaction Component	Volume (μL) Per Sample
Tribo™ 2x qPCP Super Mix	10.0
Primer-probe Mix	1.0
DNA sample	1-3
Water	up to 20 μL

Internal control should be included as below: Positive Control (3 μL DNA /reaction) Negative Control (3 μL DNA/reaction)
Blank Control: no DNA template

2. Suggested PCR conditions

Step	AmpliTaq Activation	PCR	
	HOLD	CYCLE (40 cycles)	
		Denature	Anneal / Extend
Temperature	95 °C	95 °C	60 °C
Time	3 min	10 sec	30 min

DATA ANALYSIS

Positive Reaction: Sample Ct < or = 35， and Positive, Negative and Blank controls are normal.
Negative Reaction: Sample Ct > 35， and Positive, Negative and Blank controls are normal.
Repeat Reaction: If one of the control reactions is not normal, PCR reaction is failed, and should be repeated.