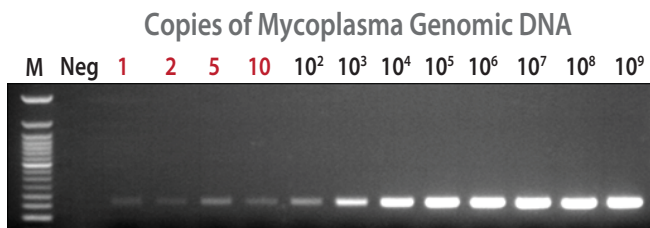


# MycoQuick™ Detection Kit

Mycoplasma detection kit for cell cultures

Mycoplasmas are small, round or filamentous prokaryotic organisms that lack cell walls. There are over 100 recognized species. Due to their small size and deformability, mycoplasmas can pass through 0.22µm filter. They are unresponsive to common antibiotics that target cell wall synthesis. Mycoplasma contamination can modify many aspects of cell physiology without causing obvious medium cloudiness and apparent effect on cell growth. It has been estimated that at least 15%-35% cell cultures are contaminated with mycoplasma. *Your cultures may have mycoplasma too, it's better to know and begin removal.*

## Ultrasensitive Mycoplasma Detection

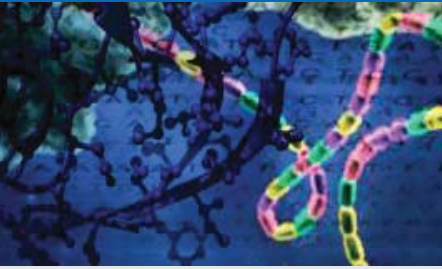


The MycoQuick mycoplasma detection kit detects the top five common species of mycoplasma, *M. Hyorhinis*, *M. Arginini*, *M. Orale*, *M. Fermentans*, *A. Laidlawii*, which represent 98% of tissue culture infections. It can also detect *Mycoplasma*, *Acholeplasma*, *Ureaplasma* and *Spiroplasma* from other genera.

## The MycoQuick duplex PCR reaction

A positive control is included to monitor the successful amplification of PCR reaction and confirm the size of the PCR products in the testing samples. The mycoplasma primers will generate a 280 bp product. The UCE primers will generate a 205 bp band. The UCE primers confirm the absence of PCR inhibitors in all PCR samples. The UCE primers have been tested to detect an ultra-conserved element (UCE) in human, mouse and rat genome. Both mycoplasma primers and UCE primers are coated at the bottom of the each well of 96-well plate. Two amplifications can be achieved simultaneously in one PCR reaction. The two PCR products can be easily separated from each other on a 2.5% agarose gel.

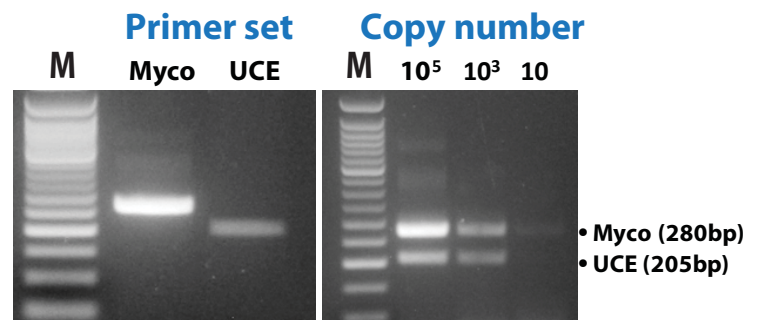
The MycoQuick mycoplasma detection kit is capable of detecting mycoplasma infection in cell cultures in less than three hours. The system can detect mycoplasma from both cell lysates and cell culture media. The sensitivity is up to 10~100 copies of target DNA.



## Highlights

- Rapid protocol using PCR
- Detect a wide range of mycoplasma species
- Use culture media or cell lysates
- No DNA extraction needed
- Results ready in 3 hours

Detect mycoplasma directly from media



*See reverse side for the MycoQuick protocol.*

# MycoQuick Mycoplasma Detection Kit

## Simple, sensitive and accurate results every time

The MycoQuick kits come complete with a lysis buffer allowing for PCR reactions without DNA extraction and a 96-well plate with mycoplasma primers and UCE primers coated at the bottom of each well. The 12 wells of the last lane also contain positive control DNA templates for mycoplasma and UCE. The plate can be cut into strips according to the number of the samples to be tested.

## Sample Preparation for MycoQuick Media test

Follow the Steps below:

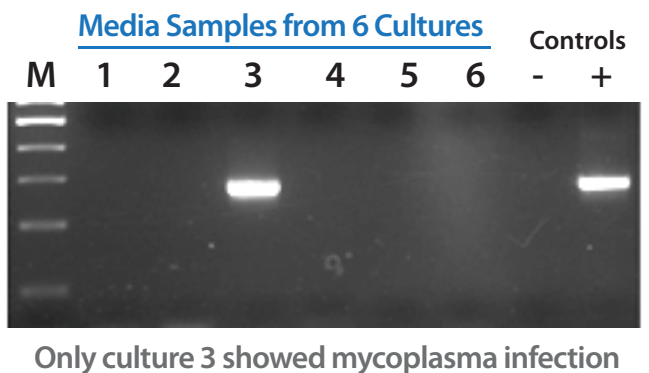
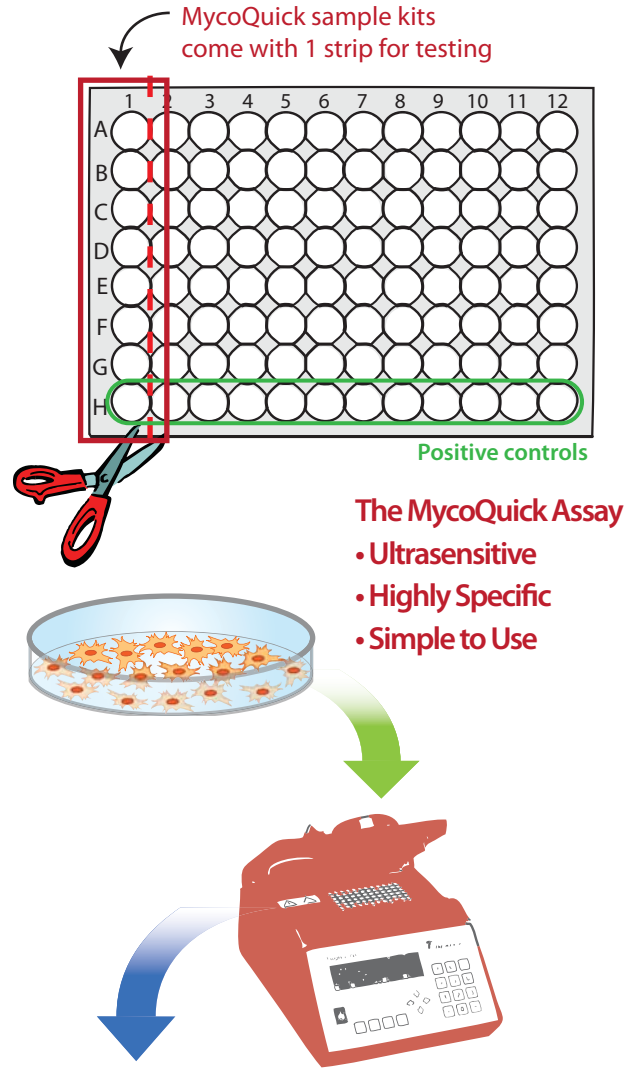
1. Collect 1 to 1.5 ml medium
2. Centrifuge the sample at 13,000 rpm for 5 minutes
3. Aspirate supernatant and save pellet
4. Wash the pellet once with 0.5 ml DPBS
5. Add 100 µl MycoQuick Lysis buffer, pipet up and down
6. Let stand for 5 minutes at room temperature
7. Incubate at 95°C for 5 minutes
8. Centrifuge the lysate at 13,000 rpm for 5 minutes
9. Transfer the supernatant to a fresh tube

## Example PCR set up and Sample data

Combine:

- 2.5 µl 10X Standard Taq Reaction Buffer
- 1.0 µl 10 mM dNTPs
- + 1.0 µl Lysate (from media or cell lysate)
- 0.2 µl Taq DNA polymerase
- 20.3 µl Water
- 25 µl PCR reaction

Cycle(s)	Temperature	Time
1	95 °C	30 s
40	95 °C	30 s
	56 °C	30 s
	68 °C	30 s
1	68 °C	5 min



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