

## Mycoplasma Detection Kit, PCR

### Cat. No. BGT-MPM-108

Store at -20°C.

### Product Description

**Mycoplasma Detection Kit, PCR** offers **highly specific and sensitive** detection of 200+ strains of Mycoplasma in less than 2 hours. This best-selling kit is designed to minimize false positives, ensuring quick and reliable routine screening of cell cultures. Mycoplasma species are highly undesirable, easily acquired, and notoriously difficult to detect, altering infected cells at the molecular level and leading to visible changes in cell morphology and growth characteristics. Timely detection of Mycoplasma in cell cultures is recommended in order to deter wide-spread contamination and save on the costly efforts of elimination. Our proprietary MasterMix formulation contains a gel loading dye, making it convenient for gel electrophoresis.

Product Component	Quantity
2X PCR MasterMix	100 rxn (1.25 ml)
Primer Mix	100 µl
Positive Control	250 µl
Nuclease-Free H <sub>2</sub> O	1.0 ml

### Protocol

- Cells should remain in culture for at least 48-72 hours undisturbed prior to screening and be at least 80% confluent.
- From the cell culture, collect 2.5 µl of the media.
- Mix individual components before use and assemble reaction on ice.

Component	Volume
2X PCR MasterMix	12.5 µl
Primer Mix	1 µl
Test Sample, Positive Control, or NTC (ddH <sub>2</sub> O)	2.5 µl
Nuclease-Free H <sub>2</sub> O	Up to 25 µl

- Gently mix the reaction components, and briefly centrifuge. Run thermocycling conditions for standard PCR:

Step	Temperature	Time	Cycle(s)
Initial Denaturation	95°C	3 min	1
Denaturation	95°C	15 sec	30 - 40
Annealing	55°C	15 sec	
Extension	72°C	15 sec	
Final Extension	72°C	1 min	1
Holding	4°C	-	-

- After PCR, maintain the reaction at 4°C or store at -20°C until use.
- Analyze the amplification products by agarose gel electrophoresis.
- Visualize by ethidium bromide OR dye staining.

### General Notes

- PCR product of approximately 500 bp in length indicates that the cell culture media tested is contaminated with Mycoplasma. Note that the length of the PCR product will vary between 370-550 bp depending on the different Mycoplasma strains.
- Keep reaction mixture on ice prior to running the PCR and start the PCR as soon as the reaction mixture is prepared.