



Universal Mycoplasma Detection Kit

Bring the power of Universal Mycoplasma Detection to your lab.

Universal Mycoplasma Detection from ATCC — a new PCR-based kit for the routine detection of mycoplasma DNA — from the leader in cell culture. The kit combines universal PCR primers targeted to the 16S rRNA gene, a touchdown PCR protocol to increase sensitivity, and a unique thermostable DNA polymerase to increase specificity. This method meets the standards of the European Pharmacopeia 2.6.7 guidelines (Biologicals 38, March 2010).



Designed with your needs in mind

Superior Sensitivity

Detects 2.5 to 25 fg of target DNA, corresponding to 4 to 40 genome copies per assay, for the mycoplasma species most likely to infect cell culture

Confirmed Specificity

Does not cross-react with closely-related bacterial or mammalian genomic DNA

Broad Detection Range

Recognizes more than 60 mycoplasma species

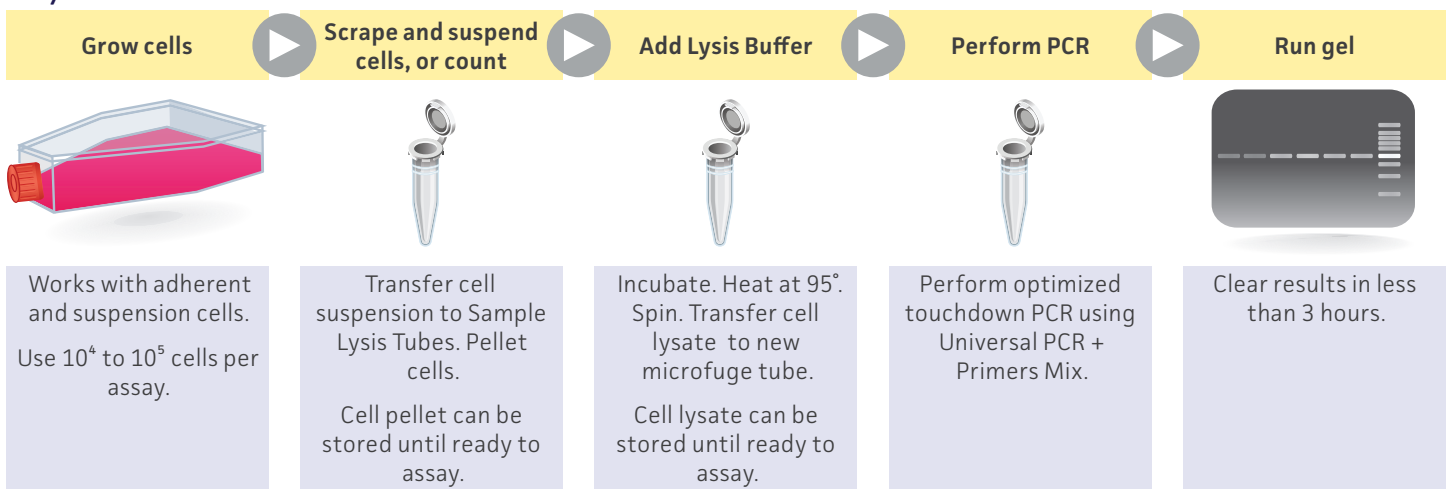
Fast

Results in less than 3 hours

Convenient

Provides all components for detection in an easy-to-use format

Easy-to-use



See for yourself

You have many options for the routine detection of mycoplasma including other PCR-based kits, metabolic assays, and growth on selective media. Scientists at ATCC developed a rigorous model system to evaluate the performance of the Universal Mycoplasma Detection Kit compared to the most widely used commercially available products.

ATCC® CCL-10™ BHK cells were infected with a sequence-verified strain of *M. orale*, one of the eight mycoplasma strains most likely to infect cell cultures. Once established, ten-fold serial dilutions were performed. At each step, the cells were counted as well as plated on selective medium to determine the number of colony forming units (CFU) per mL culture. Following the instructions provided for all the kits that were evaluated, each dilution was tested for the presence of mycoplasma.

Representative data is presented below.

Summary of Results for BHK Cells Infected with *M. orale*

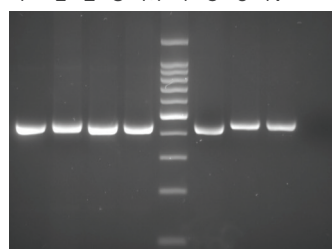
	Dilution					
	1	2	3	4	5	6
Number of Cells/mL	500,000	50,000	5,000	500	50	5
CFU/mL	2,208	154	13	2	0	0
ATCC	+++	+++	++	++	+	+
Supplier 1	++	+	+	+	+/-	+/-
Supplier 2*	+++	++	++	-	-	-
Supplier 3*	+	++	++	++	-	-

* Positive and negative scores were determined by following the Suppliers' instructions. Supplier 2 provides a metabolic assay for the detection of mycoplasma; Supplier 3 provides a PCR-ELISA test kit.

PCR gels were run for samples analyzed by Universal Mycoplasma Detection and the kit from Supplier 1. Suppliers 2 and 3 are kits that require an instrument for assay read-out. A distinct band was easily visualized in all samples when using the Universal Mycoplasma Detection Kit. Using the PCR kit from Supplier 1 gave less intense bands at all concentrations tested; the most dilute samples yielded ambiguous results. Instrumentation-based systems provided by Suppliers 2 and 3 were much less sensitive.

ATCC Universal Mycoplasma Detection

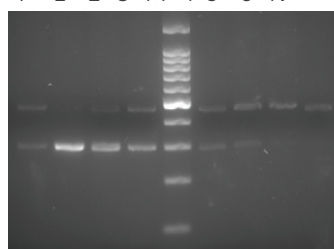
P 1 2 3 M 4 5 6 N



← Mycoplasma Band

Supplier 1

P 1 2 3 M 4 5 6 N



P=Positive control N=Negative control M= 100 bp Ladder Lanes labeled 1 through 6 correspond to the dilution series

You trust ATCC to provide you with authentic cell lines that are clean. Following good laboratory procedures, and routine use of the ATCC Universal Mycoplasma Detection Kit, we'll help you keep them that way.

Ordering Information

ATCC® No.	Description	Size
30-1012K	Universal Mycoplasma Detection Kit	40 assays

To learn more, please visit us at www.atcc.org/MDK.

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