

SEQ NOTES

Rapid Molecular Methods for Pharmaceutical Manufacturing

microseq.com

Which sample preparation protocol should I use for Mycoplasma detection?

The decision on which PrepSEQ™ sample preparation protocol to use for Mycoplasma detection depends on sensitivity requirements, test sample volume available and desired time to result.

The MicroSEQ® Mycoplasma Detection System is the first integrated system that combines sample preparation and Real-Time, quantitative PCR assay for the detection of Mycoplasma in cell culture samples.

Included in the system is proprietary PrepSEQ™ Sample Preparation Kit with Module M, optimized for highly efficient

DNA recovery from complex matrices, including samples that have high cell densities, low cell viability, or large test sample volumes.

The PrepSEQ sample preparation kit uses magnetic bead-based separation technology to extract Mycoplasma DNA from test samples containing cultured cells. Samples that may be tested for the presence of Mycoplasma include research cell lines, bioassay cell lines, cell culture manufacturing samples (from inoculation to harvest), stem cell lines, cellular and tissue therapy samples. For the highest level of sensitivity, the standard protocol enables concentration of Mycoplasma from a large test sample volume into a sample volume compatible with PCR analysis.

What are your sensitivity, test sample volume and time to result needs?

High sensitivity
Low test sample volume
Fastest time to result

Highest sensitivity
Test sample volume and sensitivity
comparable to 28-day culture based test

PrepSEQ™ Kit 1-2-3 Protocol

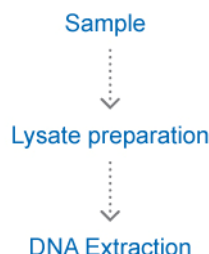
The optimal protocol will be provided depending on:

- Test sample volume requirement
- Sensitivity requirement
- Time-to-results requirement
- Application

PrepSEQ™ Kit Standard Protocol

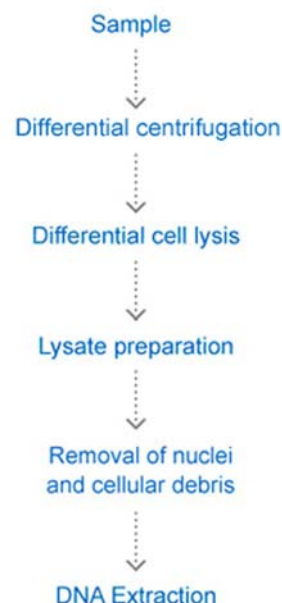
PrepSEQ™ Kit 1-2-3 Protocol

In the PrepSEQ Kit 1-2-3 protocol, a rapid procedure recovers DNA from total lysate of the test sample. The optimal protocol will be developed, with the help of Applied Biosystems scientists, depending on specific requirements for test sample volume, sensitivity, and time-to-results, and by application.



PrepSEQ™ Kit Standard Protocol

In the PrepSEQ Kit standard protocol, lysates of samples are prepared and cellular DNA are reduced before extraction of the Mycoplasma DNA. The lysates contain Mycoplasma DNA from the free organisms in the culture media and from the Mycoplasma DNA released from the infected host cells. For the specific protocol, refer to [Protocol: PrepSEQ™ Mycoplasma Nucleic Acid Extraction Kit](#).



ORDERING INFORMATION

Description	Part Number
MicroSEQ® Mycoplasma Detection System Includes PrepSEQ™ Sample Preparation with Module M, MicroSEQ® Mycoplasma Real-Time qPCR assay. Protocol and Quick Reference Card included.	4407876
MicroSEQ® Mycoplasma Detection System Includes PrepSEQ™ Sample Preparation with Module M, MicroSEQ® Mycoplasma Real-Time qPCR assay. Protocol and Quick Reference Card not included.	4409732
MicroSEQ® Mycoplasma Detection Assay Protocol and Quick Reference Card included.	4399363
MicroSEQ® Mycoplasma Detection Assay Protocol and Quick Reference Card not included.	4384772

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