Mycoplasma detection - qualitative PCR

Purpose of the service

The presence of mycoplasma in cell culture is highly undesirable and can conclude in a serious distortion or even failure of *in vitro* experimental results coming from:

- undesirable changes of cell morphology
- inhibition of cell metabolism
- alteration of cell membrane transport
- inhibition of cell growth
- alteration of DNA and chromosomal aberrations

Principle of the test

The method involves isolating DNA from a sample of a conditioned eukaryotic cell medium. Subsequently, amplification and detection of a highly conserved region encoding 16S ribosomal RNA specific for mycoplasmas is performed by real-time PCR. This method is used for the qualitative determination of mycoplasmas in a sample.

Available products

Cat. No.	Product
2606-GMP	Mycoplasma detection - qualitative PCR

Parameters of the test

The method used meets the requirements of the European Pharmacopoeia given in Chapter 2.6.7.

Limit of detection: **10 cfu/ml**

Requirements for a material to be tested

The customer provides us with **0,5 ml** of cultivation medium (or cells suspension), prepared according to the instructions below.

Preparing cells to be tested

To ensure reliable test results, please keep carefully to the recommendations as follows:

- Cell confluency must be at least 80 % at the moment of medium withdrawal.
- Withdrawal of a medium sample to be tested must be performed no sooner than 2 days following the last exchange of medium.
- Incubate at least 0.5 ml of the collected culture medium at 95 ° C / 10 minutes. Then centrifuge (11,000 × g, 15 seconds) and store at -20 ° C.
- In the case of suspension cell testing, a maximum concentration of 1×10^6 cells / ml is required.

Sample delivery

If the delivery time does not exceed 24 hours, send samples chilled to **2 to 8 °C** (on wet ice), otherwise we recommend delivery on dry ice.

Output of the test

We provide you with a protocol in English with a statement if the presence of mycoplasma was detected.