

# MYCOPLASMACHECK

## Sample Preparation

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### For maximum sensitivity: Recommendations for cell culture cultivation prior to testing

- Cell lines should be cultured in the absence of mycoplasma-active antibiotics for one week prior to submission. Penicillin and streptomycin do not affect mycoplasma nor do they inhibit **MYCOPLASMACHECK**.
- Cell cultures should be maintained in the same media without dilution with fresh media for three days before testing.
- Cryopreserved cell cultures should be cultured about two weeks prior to sample submission.
- 80-90% confluence of the tissue culture is recommended for testing. Inhibiting substances may accumulate in >90% confluent cultures.

### Sample preparation of cell cultures:

1. **(a)** Transfer 500 µl of cell culture supernatant from the test cell culture to a 1.5 ml tube. The lid should be sealed tightly to prevent opening during heating.  
**(b)** For suspension cell lines, stand culture flasks vertically allowing cells to settle for about 30 minutes prior to removal of 500µL of the supernatant and transfer to a 1.5 ml tube.
2. Boil supernatant at 95 °C for 10 minutes.
3. Briefly centrifuge (5 seconds) the sample at ~13,000 rpm to pellet cellular debris.
4. Transfer 100 – 200 µl of supernatant into a new 1.5 ml tube labelled with a **MYCOPLASMACHECK** barcode. Do not disturb pellet

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### Sample preparation of cell cultures that are prone to PCR inhibition:

#### For adherent cell lines:

- A) Transfer 500 µl of cell culture supernatant from the cell culture to a 1.5 ml tube.
- B) Centrifuge sample for 10 min at >10.000 x g to pellet mycoplasma cells.
- C) Discard 450 µL of supernatant without disturbing any pellet.
- D) Boil remaining 50µL at 95 °C for 10 minutes. The lid should be sealed tightly to prevent opening during heating.
- E) Perform DNA extraction using any commercially available DNA extraction kits according to the manufacturer's instructions.
- F) Elute in 30 µL using a 1.5 ml tube labelled with a MYCOPLASMACHECK barcode.

#### For suspension cell lines:

- G) Centrifuge 500 µL sample for 3 min at >300 x g to pellet eucaryotic cells.
- H) Transfer supernatant in new 1.5 ml tube.
- I) Continue with step (B).

### Testing of other non-cell-culture related material like cell pellets, fetal calf serum or cryo stocks:

- Those materials can be tested after DNA preparation by the customer using commercially available DNA extraction kits.  
e.g. QIAamp DNA Mini Kit (QIAGEN) or NucleoSpin® DNA RapidLyse (Macherey-Nagel)