

MycoDect™ Mycoplasma Detection Kit Product Specification Sheet

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| Product Name | MycoDect™ Mycoplasma Detection |
| Description | <p>Mycoplasmas are small, round or filamentous prokaryotic organisms that lack cell walls. It has been estimated that at least 15%-35% cell cultures are contaminated with mycoplasma. Mycoplasma contamination can modify many aspects of cell physiology without causing obvious medium cloudiness and apparent effect on cell growth. Mycoplasma contamination affects up to 80% of continuous cell cultures. If undetected, mycoplasma contamination can have significant effects on the quality and reliability of your cell culture preparations. Due to their small size and deformability, mycoplasmas can pass through 0.22µm filter. The lack of cell wall makes mycoplasma unresponsive to common antibiotics that target cell wall synthesis. It is essential that all cell stocks and new cultures entering a facility are tested for the presence of mycoplasma and all cell cultures should be tested routinely (e.g. once every 2-3 months) in order to maintain a mycoplasma-free environment.</p> <p>Many methods are available for detection of mycoplasma, including isolation in broth/agar culture, direct or indirect fluorescence staining, ELISA, immunostaining, direct or indirect PCR. Among those methods, direct PCR is the most sensitive, specific and convenient method when the primer design is optimized.</p> <p>The MycoDect™ Mycoplasma Detection Kit is designed to detect mycoplasma infection in cell cultures in less than two hours. It can detect mycoplasma from both cell lysates and cell culture media. The sensitivity is up to 10-20 copies of target DNA, which translates to less than 10 mycoplasma species. This kit detects the top five common species of mycoplasma, <i>M. Hyorhinis</i>, <i>M. Arginini</i>, <i>M. Orale</i>, <i>M. Fermentans</i>, <i>A. laidlawii</i>, which represent 98% of tissue culture infections. It can also detect Mycoplasma, Acholeplasma, Ureaplasma and Spiroplasma from other genera</p> |
| Catalog Number | MD050, MD200 |
| Size | 50 reactions (MD050) / 200 reactions (MD200) |
| Shipping | Dry ice or blue ice |
| Storage and Stability | Store at -20° C. This product is stable for 12 months when stored as directed. |
| Quality Control | Appearance, blank, and sensitivity tests are performed for each lot. Only lots that pass the following criteria are offered: Blank Absorbance (460 nm) ≤ 0.700 Sensitivity Absorbance (460 nm) ≥ 1.000 |
| Kits Components | MD200 (200 reactions) <ol style="list-style-type: none">1. MycoDect PCR Mix (4 vials)2. MycoDect Primer Mix (4 vials)3. Positive Control (1 vial)4. Negative Control (1 vial)5. Lysis buffer (2 vials) |



MD050 (50 reactions)

1. MycoDect PCR Mix (1 vial)
2. MycoDect Primer Mix (1 vial)
3. Positive Control (1 vial)
4. Negative Control (1 vial)
5. Lysis buffer (1 vial)

Safety Precaution

ALSTEM highly recommends that protective gloves, a lab coat, and a full-face mask always are worn when handling frozen vials. It is important to note that some liquid nitrogen can leak into the vials when submersed in liquid nitrogen. Upon thawing, the liquid nitrogen returns to the gas phase, resulting in excessive pressure within the vial that can cause the vial to explode or expel the cap with dangerous force.

Restricted Use

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

