

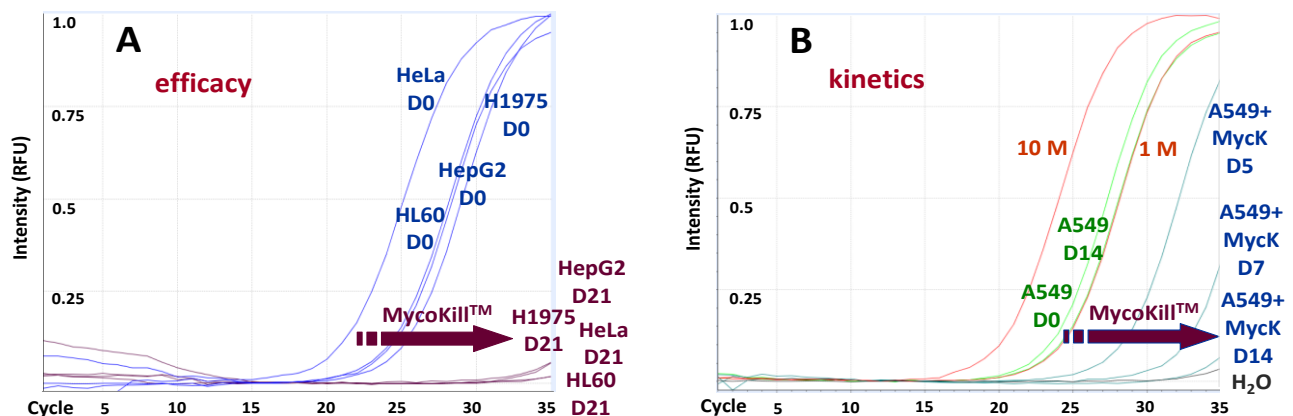
MycoKill™

Mycoplasma Eradicating Agent

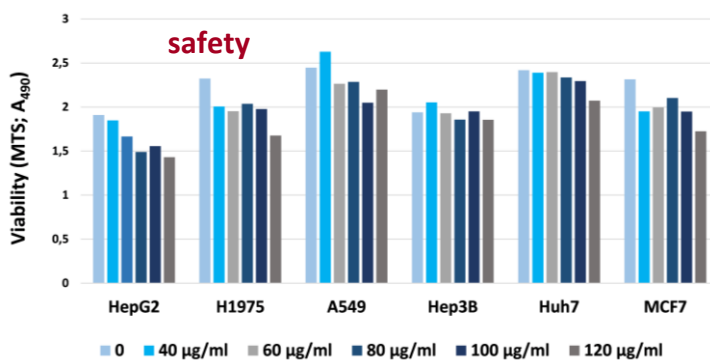
MycoKill™ (Cat# MK-2L, MK-8L) is used to remove mycoplasma and related cell wall-less bacteria from cells.

MycoKill™ was developed as a highly active antimycoplasma reagent. It contains two bactericidal antibiotics: one inhibits bacterial DNA replication and the other is a protein synthesis inhibitor. These compounds act only on mycoplasmas and other bacteria. Because their targets are absent in eukaryotic cells therefore MycoKill™ is safe for cell cultures and it does not affect their viability.

Effects of MycoKill™ on eradication of mycoplasmas from cultured cells are presented below. Detection and quantitation of mycoplasma bacteria was done by using the MycoQuant™ real-time PCR based mycoplasma quantitation kit (Avidin; Cat# MQ-050, MQ-100, MQ-250).



A) Efficacy. 21 days incubation of different cell lines (HeLa, H1975, HL60, HepG2) with 25 µg/ml MycoKill™ resulted in complete elimination of mycoplasmas in all cell cultures as confirmed by QPCR (HeLa D21, H1975 D21, HL60 D21, HepG2 D21). **B) Kinetics.** MycoKill™ at 25 µg/ml concentration was effective in decreasing mycoplasma infection over time. A549 cells were heavily infected by mycoplasmas (app. 1 million particles in 100 ng genomic DNA) (A549 D0) as verified by the positive controls in the PCR (10 M, 10 million; 1 M, 1 million). After cultivating A549 cells with MycoKill™ for 5, 7, 14 days (A549+Myck D5, D7, D14) decreased number of mycoplasma particles could be detected, while in the untreated control the extent of infection did not change (A549 D14).



To demonstrate the safety of MycoKill™ on cell viability different concentrations (all above the 25 µg/ml therapeutic dose) were tested. The viability of six human cell lines were incubated with MycoKill™ for 4 days and viability was assessed by spectrophotometry using the MTS reagent as an indicator. No significant cytotoxic effect could be recorded even at high doses, therefore the application of MycoKill™ as an antimycoplasma agent is safe.

Warning: Avidin's anti-mycoplasma products are suitable for research purposes only, and not for human or animal care

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