

Detection of Mycoplasma DNA: zPCR vs. PCR

Sensitivity Comparison

ZeptoSense's proprietary sensitive DNA detection method (zPCR) was compared to the PCR method for the detection of Mycoplasma control DNA. The PCR could detect only **1/64** while the zPCR detected **1/512** dilutions of CFU's (Colony Forming Units) using the Capillary Electrophoresis detection platform.

Figure 1

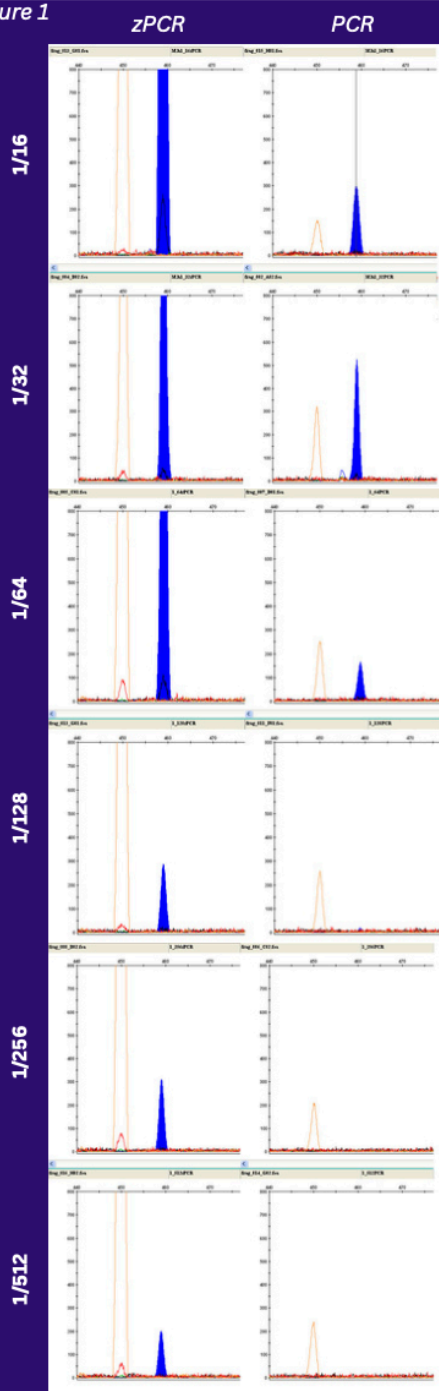
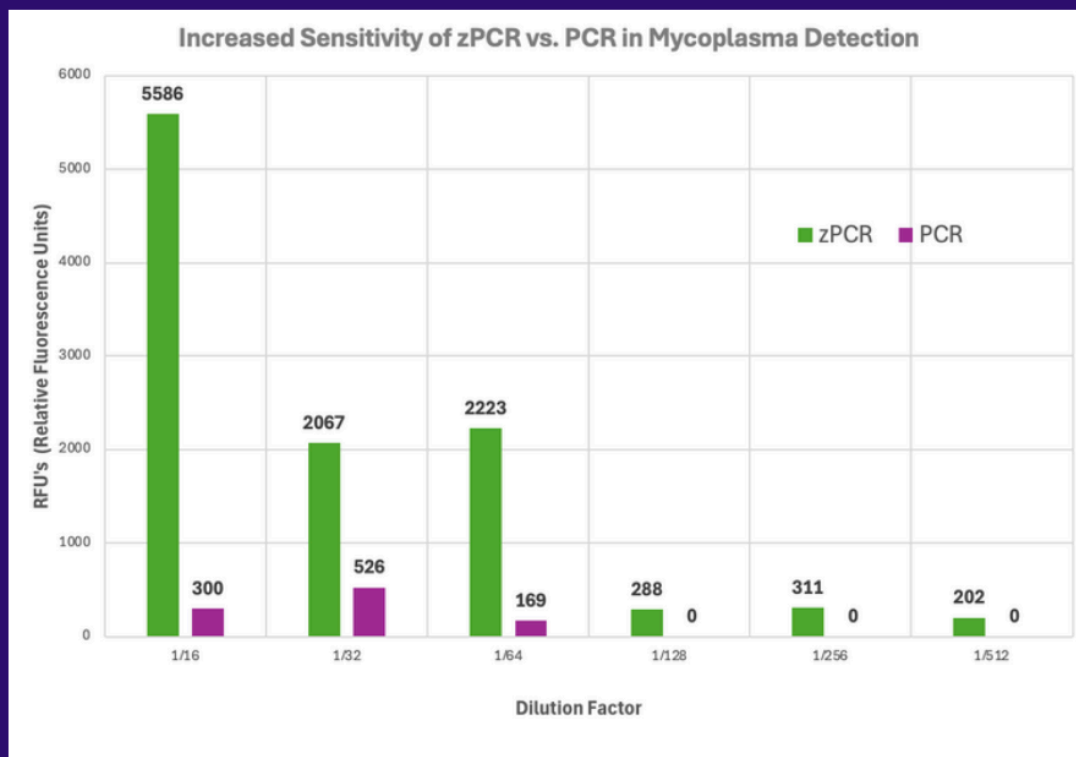


Figure 2



zPCR outperforms PCR in sensitivity by up to 17x across all Mycoplasma DNA-template concentrations.

Figure 1: Electropherogram RFU's (relative fluorescence units) generated by the zPCR (left) and PCR (right), each row representing different dilutions.

Figure 2: The RFU (relative fluorescence units) of product readings from the electropherograms showing detection by the zPCR method of 1/128, 1/256, and 1/512 dilutions that could not be detected by the PCR method.

17x better sensitivity of zPCR over PCR tests leads to early detection of Mycoplasma contamination