

## PROPER MAINTENANCE AND DATA ANALYSIS USING THE QUANTIFILER™ AND QUANTIFILER™ Y HUMAN DNA QUANTIFICATION KITS ON THE ABI PRISM® 7000 SEQUENCE DETECTION SYSTEM

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The human identification community is familiar and adept with the use of AmpF/STR® PCR Amplification Kits, ABI PRISM® Genetic Analyzers and GeneScan® and Genotyper® software for forensic data generation and analysis. Recently, additional products have been introduced for use in human identification laboratories for forensic DNA analysis.

DNA quantification of each sample is an important initial step to help ensure optimal STR analysis. Currently, many forensic laboratories use various quantitation assays in order to determine the amount of DNA present in samples in preparation for short tandem repeat (STR) analysis. The quantitation of DNA samples is used in human identification applications to include forensic testing, offender databasing and paternity testing. Since these quantitation assays are used on a regular basis by forensic laboratories, it is important that they are accurate, reliable, reproducible, and easy to use. The Quantifiler™ Human DNA Quantification Kit and the Quantifiler™ Y Human Male DNA Quantification Kit provide all components needed for reliable, reproducible, and highly sensitive real-time PCR quantification of human identity samples.

This presentation is intended as a review of proper maintenance to improve and sustain high quality data analysis with the ABI PRISM® 7000 Sequence Detection System when using the Quantifiler™ Human DNA Quantification kit and the Quantifiler™ Y Human Male DNA Quantification kit. Additionally, this presentation will include a section that will describe the techniques used to isolate and eliminate non-optimal results when using the Quantifiler™ Human DNA Quantification kit and the Quantifiler™ Y DNA Quantification kits.