

DNA IQ™ CASEWORK PRO KIT FOR MAXWELL® 16; IMPROVED PERFORMANCE FOR FORENSIC CASEWORK

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Investigation revealed lot to lot variability of the isolation efficiency of the DNA IQ™ System chemistry as performed on the Maxwell® 16 instrument. A design change of the LEV Plunger, used to perform the underlying chemistry, significantly reduced lot to lot variability and improved isolation efficiency. This improvement was achieved through a change to the plunger only, without changes to the underlying DNA IQ™ chemistry or Maxwell® 16 firmware method. We demonstrate significant improvement in the isolation efficiency with multiple sample types relevant to forensic sample types, including comparison of DNA isolation of the system to that of traditional organic extraction methods. The improvement in isolation efficiency has been incorporated into the DNA IQ™ Casework Pro Kit for Maxwell® 16.