

**DNA IQ™ SYSTEM: RESULTS WITH PARAFFIN EMBEDDED TISSUES
AND “CHALLENGED SAMPLES”**

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The DNA IQ™ System was tested for its ability to obtain DNA from paraffin embedded tissues and for obtaining DNA from “challenged samples.”

Study I: Four paraffin embedded tissue blocks were used for this study. Three samples from each block were extracted using various amounts of the embedded tissue. The DNA IQ™ System – Tissue Protocol was followed. STR amplification was performed using the Profiler Plus™ amplification kit and were comparable to results previously obtained from these samples following an organic extraction.

Study II: Samples of blood dispensed directly onto dirt were extracted using the DNA IQ™ System – Database Protocol was followed using the quantities of lysis buffer as described for the 15-50mm² S&S 903 paper. STR amplification was performed using the Profiler Plus™ amplification kit and were comparable to results previously obtained from the blood donor.

Study III: A research proficiency test containing two known samples and three questioned samples was extracted using the DNA IQ™ System – Small Sample Casework Protocol. The questioned samples were bloodstains deposited on substrates (black jeans, wood and leather) which have in the past caused some difficulties. STR amplification was performed using the Profiler Plus™ and COfiler amplification kits. Results were comparable to results obtained from these samples organically extracted.

These studies indicate that the DNA IQ™ System can be used to obtain DNA from paraffin embedded tissues and “challenged samples” for amplification and typing using STR analysis.