# Applications of Identity Testing in the Clinical Laboratory

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While clinical laboratory specimens are rarely accompanied by chain-of-custody documentation, most specimens are followed by tracking forms which include patient demographic data, accession number, and date and time of collection. As part of a thorough quality assurance program, proper documentation of test requisitions and tracking forms is mandatory. However, despite these efforts, specimen mislabeling or other mix-ups can and do occur. We demonstrate the utility of the PM+DQA1 typing kit and STR analysis using the Visible Genetics automated DNA sequencing system in the proper identification of such clinical specimens including urine, blood, and paraffin-embedded tissues. In each case, sufficient DNA was extracted from these specimen types using a non-organic extraction protocol for typing purposes. We conclude that these two typing methods are feasible for distinguishing clinical laboratory specimens of questionable identity and complement existing quality assurance techniques.