

Human Identification using the PowerPlex16 system on the MegaBACE DNA analysis platform

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Promega's PowerPlex®16 and PowerPlex®16 bio kits have become a widely accepted tool for human forensic identification and paternity testing. However, the backlog of crime scene DNA samples and convicted offender DNA has created the need for high throughput analysis platforms. The MegaBACE1000 DNA Analysis System is a multi-application capillary electrophoresis instrument capable of analyzing up to 96 genotypes in a single 70 minute run. This platform is presently validated for the use of PowerPlex 16 and PowerPlex16Bio in human identification in Brazil, Australia and the United Kingdom. We show successful genotyping of Promega control male and female DNA using the PowerPlex16 kit on the MegaBACE 1000 with all 16 loci automatically genotyped using Fragment Profiler 1.2 software.