

## **Performance equivalence of the newest generation Capillary Electrophoresis system with established CE platforms**

### **Genomics**

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Fluorescent capillary electrophoresis (CE) is a flexible genomic analysis method that separates fluorescently labeled DNA fragments based on size. It is the foundation of Sanger sequencing and DNA fragment analysis. The simple workflow, single-base resolution, rapid analysis time, small sample volume, and flexibility have resulted in widespread adoption for a variety of applications used in basic, translational, and clinical research. Applied Biosystems™ is the leader and continues to provide innovative solutions for CE analyses. We leveraged our experience in the field and incorporated many improvements and innovations into our newest addition to our CE instrument portfolio.

In this poster, we demonstrate a broad spectrum of genetic analysis applications and workflows that can be run on this new instrument. These applications include cell line authentication (CLA) and human sample matching, microsatellite instability (MSI) analysis, multiplexed PCR analysis, genome editing efficiency analysis, double-stranded DNA and NGS library QC, rare allele confirmation, and Sanger sequencing plasmids and viral genomes. In all cases, we demonstrate that the data quality was equivalent to data generated on our existing, gold-standard Applied Biosystems™ genetic analyzers. These results will give investigators and core laboratories the confidence to transition their research to the new platform while taking full advantage of the newest innovations.