

## ▼ The MassARRAY System

### Challenges in Molecular Testing

Are you tired of managing trade-offs between sample quality, limited budget, throughput constraints, and bioinformatics struggles? Selecting a molecular testing platform doesn't have to mean compromise.

#### THE AGENA SOLUTION

The MassARRAY System is a benchtop mass spectrometer that provides timely and accurate multiplexed analysis of up to hundreds of clinically relevant mutations in a single workflow.

■ The flexible throughput capacity can meet the needs of any testing volume. The system works with standard 96 and 384 well plates.



For Research Use Only. Not for use in diagnostic procedures.



## Single Day Turnaround

DNA to data in a single workday. Load and go processing allows for automated sample handling and data analysis remotely. Unlike NGS, there is no need to run data through cumbersome and expensive data pipelines. The MassARRAY Analyzer provides easy to read and interpret data.



## Low Cost Per Sample

Multiplexed analysis reduces per sample cost, targeted content eliminates bioinformatics burden, and scalable throughput optimizes batch and resource requirements.



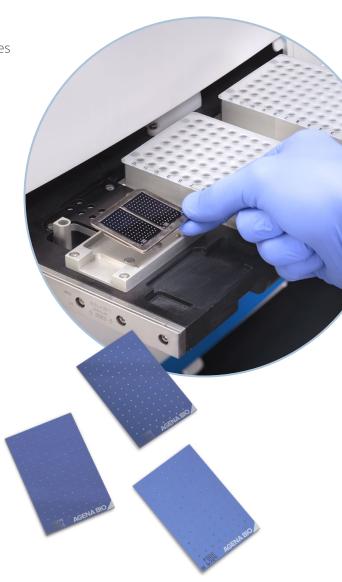
# Flexible Throughput

Direct detection of short amplicons enables compatibility with even poor or degraded nucleic acid sample types. The throughput capacity of the system allows a lab to run in 96 and/or 384-well format.



# Diverse Applications

One system, many applications. The MassARRAY system supports a broad range of applications including hereditary genetic testing, solid and liquid tumor profiling, and pharmacogenetic testing.

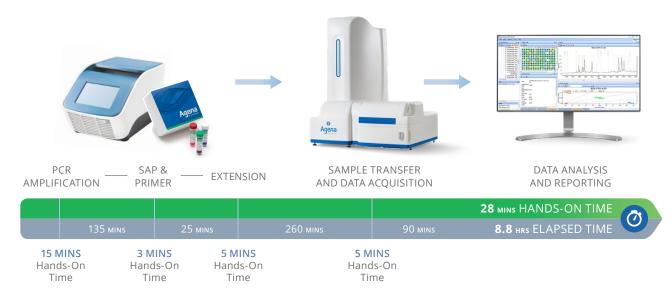


### MassARRAY System Workflow

The MassARRAY System workflow is highly reproducible and generates results within an 8-hour day. The system offers an automated workflow for both 96 and 384-well applications depending on the throughput needs of the laboratory.

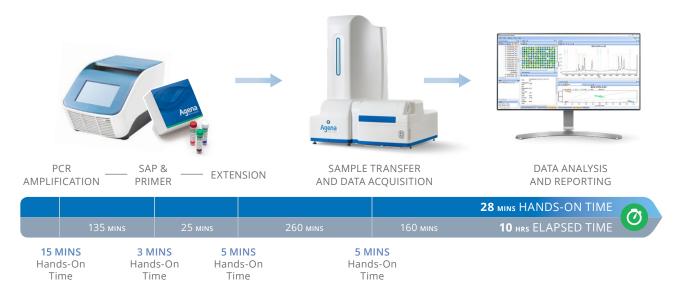
#### **AUTOMATED WORKFLOW**

The MassARRAY Analyzer with Chip Prep Module 96 reduces hands on time with load-and-go processing. It can accommodate both 96-well microtiter plates and SpectroCHIP® CPM Arrays.



#### HIGH-THROUGHPUT AUTOMATED WORKFLOW

The MassARRAY Analyzer with Chip Prep Module 384 provides automated workflow for labs who require higher throughput with 384 well microtiter plates and SpectroCHIP® CPM Arrays. For iPLEX® Pro and MassCLEAVE™ Chemistries.





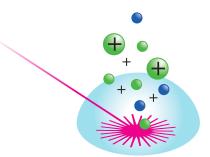
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### **MALDI-TOF Mass Spectrometry**

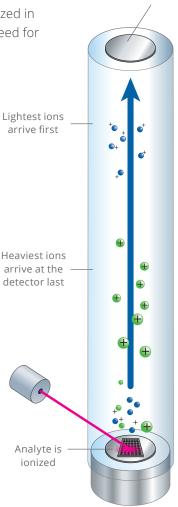
The MassARRAY System is a Matrix-Assisted Laser Desorption Ionization – Time of Flight (MALDI-TOF) mass spectrometer customized for the precise detection of DNA molecules. The molecules are distinguished by their time-of-flight after being ionized in a vacuum chamber. Direct analysis of the mass of the molecules eliminates the need for fluorescence or other labeling.

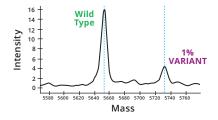
SPECTROCHIP ARRAY: The SpectroCHIP Array comes in a CPM 96 or CPM 384 pad format, upon which the sample is dispensed. The DNA extension products or analytes co-crystallize with the matrix.



**DNA IONIZATION:** The analyte crystals are irradiated by a laser, inducing desorption and ionization of the molecules

**DNA SEPARATION:** The positively charged DNA molecules accelerate up the vacuum tube towards a highly sensitive detector. The speed of the molecules is inversely proportional to the mass of the individual extension products and separation occurs by time-of-flight. The software processes the time-of-flight and differentiates the variants by their mass, producing a mass spectrum.





**ANALYSIS:** The integrated software provides a user-friendly interface to generate reports which identify the targets and review spectra. Data is saved to the database and can be retrieved at any time for analysis.

### **System Options**



#### **SPECIFICATIONS**

#### **MassARRAY System with CPM 96**

Components:	MassARRAY Analyzer 4 Chip Prep Module 96 Integrated computer
Dimensions:	37W x 43H x 27D in (104W x 110H x 68D cm)
Capacity:	2 x Microtiter plates (96-well) 2 x SpectroCHIP CPM 96 Arrays
Processing time:	90 minutes per 96-well plate

#### **MassARRAY System with CPM 384**

Components:	MassARRAY Analyzer 4 Chip Prep Module 384 Integrated Computer
Dimensions:	37W x 43H x 27D in (104W x 110H x 68D cm)
Capacity:	2 x Microtiter plates (384-well) 2 x SpectroCHIP CPM 384 Arrays
Processing time:	160 minutes per 384-well plate

#### **ORDERING INFORMATION**

Catalog No.	Product
10411	MassARRAY System, 384/96 Genotyping
10412	MassARRAY System, 384/96 EpiTyper
10445	MassARRAY System with Chip Prep Module, 96 Genotyping
10446	MassARRAY System with Chip Prep Module, 96 EpiTyper
10447	MassARRAY System with Chip Prep Module, 384 Genotyping
10448	MassARRAY System with Chip Prep Module, 384 EpiTyper

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