

SYSTEMS



# MassARRAY<sup>®</sup> System

Uncompromised  
Molecular Testing



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



# 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.
- The system supports diverse applications, allowing labs to consolidate tests onto a single platform.
- The technology is well proven for the accurate and reproducible results illustrated in over 4,000 publications.



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.



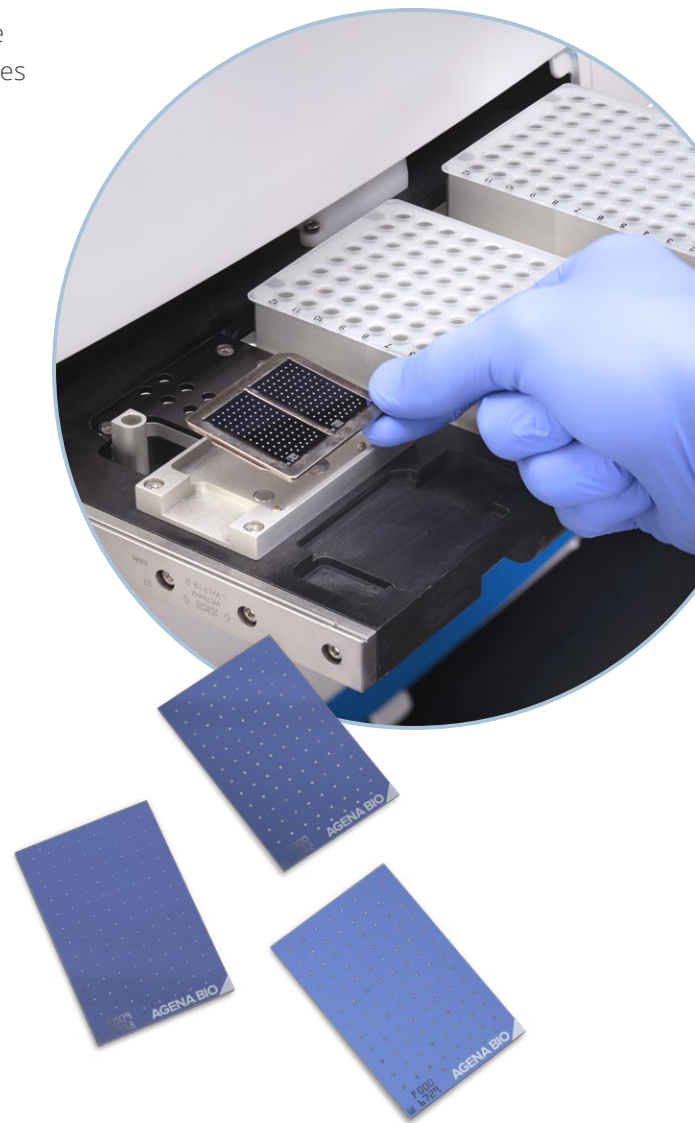
## Flexible Throughput

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.

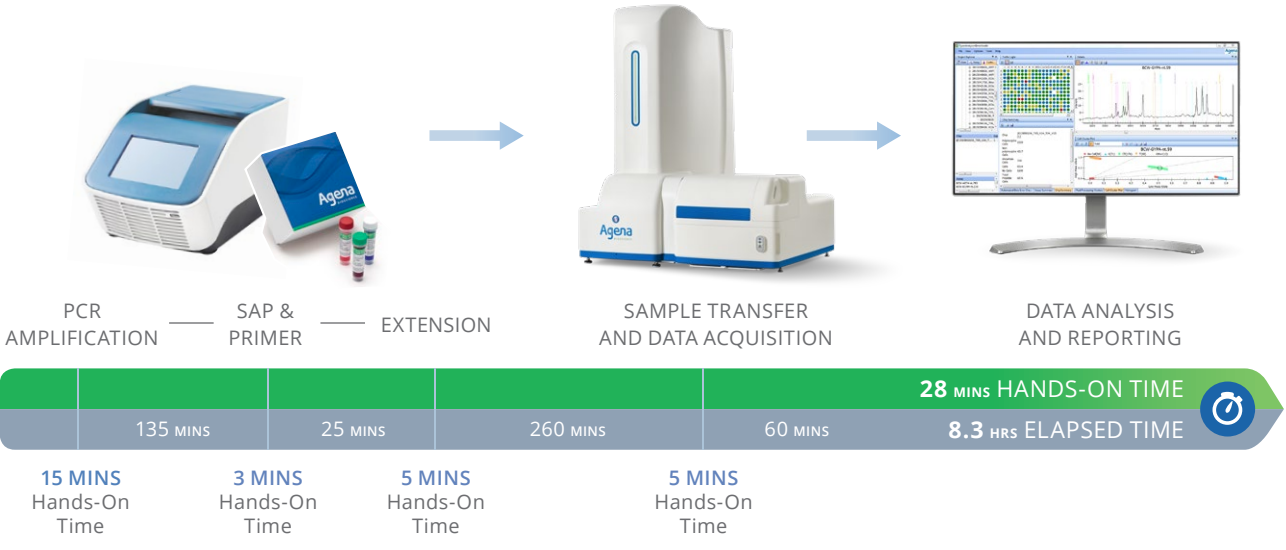


# MassARRAY System Workflow

The MassARRAY System workflow is highly reproducible and generates results within an 8-hour day. The system offers an automated and semi-automated workflow depending on the throughput needs of the laboratory.

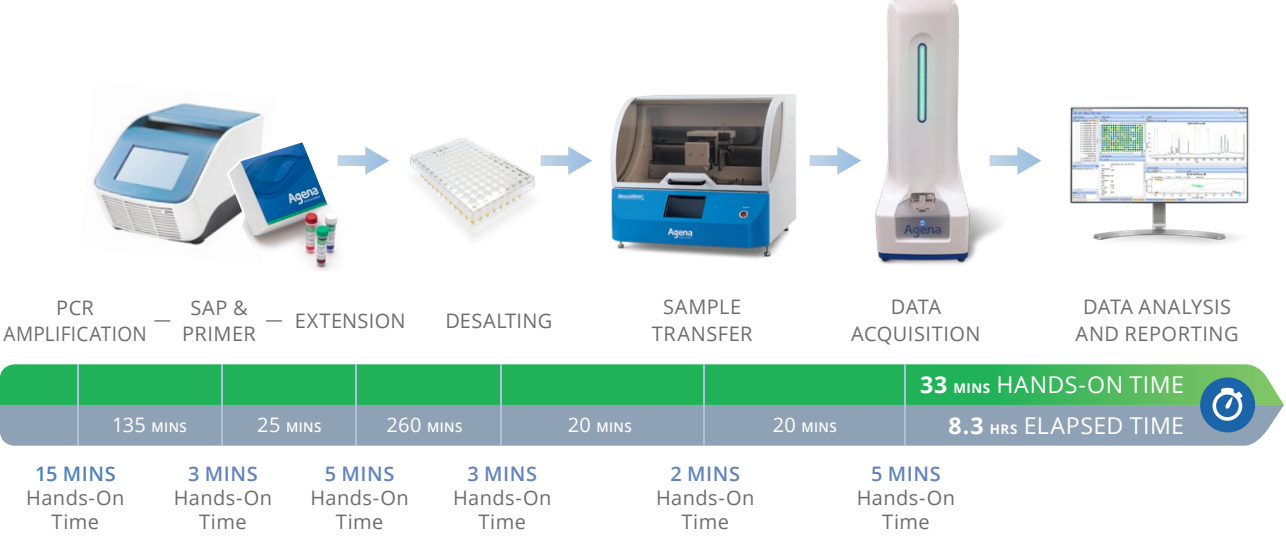
## AUTOMATED WORKFLOW

The **MassARRAY with Chip prep module** reduces hands on time with load and go processing.



## SEMI-AUTOMATED WORKFLOW

The **MassARRAY Analyzer with the Nanodispenser RS1000** allows for semi-automated workflow for labs running high throughput 384-well applications.

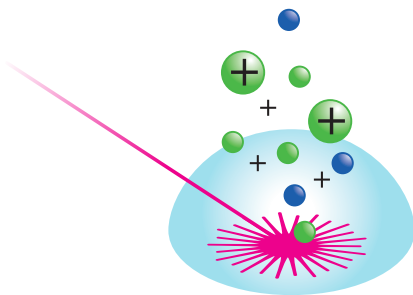




## MALDI-TOF Mass Spectrometry

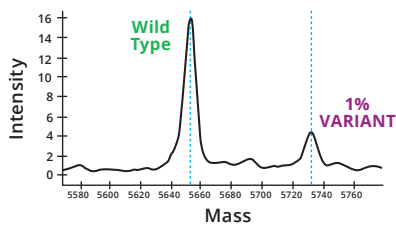
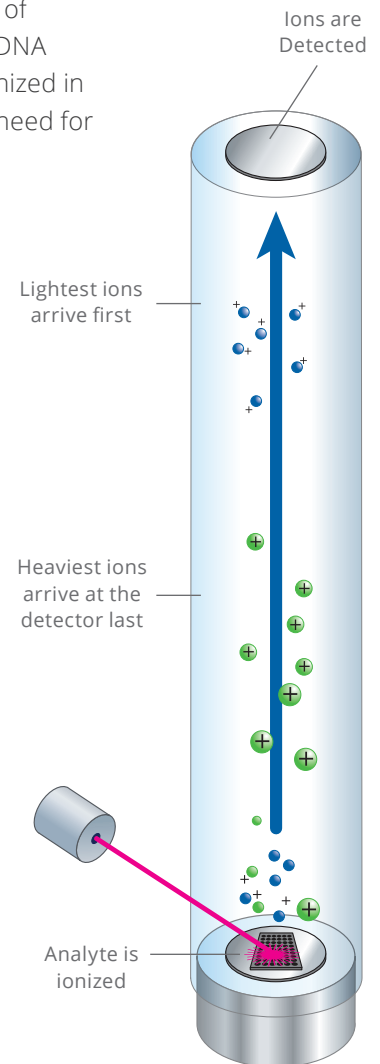
The MassARRAY System is a Matrix-Assisted Laser Desorption Ionization – Time of Flight (MALDI-TOF) mass spectrometer customized for the precise detection of DNA molecules. The molecules are distinguished by their time-of-flight after being ionized in a vacuum chamber. Direct analysis of the mass of the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

**SPECTROCHIP ARRAY:** The SpectroCHIP Array comes in a 96 or 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 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

Dimensions (WxHxD)	37x43x27 in (104x110x68 cm)
Capacity	2 x Microtiter plates (96 well) 2 x SpectroCHIP 96 Arrays
Acquisition Speed	15 minutes for SpectroCHIP 96 Array

### MassARRAY System 384/96

Dimensions (WxHxD)	18x43x27 in (45x110x68 cm)
Capacity	2 x Microtiter plates (96 or 384 well) 2 x SpectroCHIP 96 Arrays or 384 Arrays
Acquisition Speed	15 minutes for SpectroCHIP 96 Array 60 minutes for SpectroCHIP 384 Array

## 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

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

Agena Bioscience, Inc.  
4755 Eastgate Mall  
San Diego, CA 92121  
Phone: +1.858.882.2800

Order Desk: +1.858.202.9301  
Order Desk Fax: +1.858.202.9220  
orderdesk@agenabio.com  
Web: agenabio.com

**US** +1.877.4.GENOME  
**EU** +49.40.899676.0  
**AP** +61.7.3088.1600  
**CN** +86.21.6427.0566



SYS0003 01 MassARRAY, iPLEX and Agena Bioscience are registered trademarks of Agena Bioscience, Inc. UltraSEEK is a trademark of Agena Bioscience, Inc. ©2018 Agena Bioscience, Inc. All rights reserved.