

# EXTEND THE BOUNDARIES OF YOUR ANALYSIS







### **RIGHT FROM THE START**

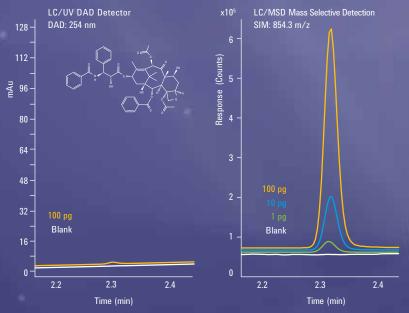
For results that are unmistakably clear, combine highly efficient liquid chromatography with easy-to-use mass selective detection (MSD) from Agilent.

From cutting-edge research to routine quality control applications, these systems offer unmatched analytical performance with proven day-after-day reliability.

Use our new, integrated systems to:

- Rapidly screen compounds and confirm molecular weights
- Quantitate target compounds
- Identify impurities
- Purify target compounds in complex mixtures

You know you can count on Agilent. For more than 40 years, Agilent systems have earned a reputation for robustness and dependability.



Many analytical challenges benefit from the added analytical sensitivity of the MSD. Consider cleaning validation, for example. The figure above shows how much more data MSD can capture.

### **ROCK-SOLID SOLUTIONS**

Whether your focus is on pharma or biopharma, environmental or food testing, disease research or chemical analysis, Agilent LC/MSD systems provide an additional level of confidence. Our systems, software, and services combine to produce integrated LC/MS systems for labs like yours every day.



# **EFFICIENT, RELIABLE LC/MSD SYSTEMS FROM AGILENT**

The InfinityLab LC/MSD Series systems are the newest additions to our InfinityLab family instruments, columns, and supplies designed to work together.

#### **Analytical efficiency**

Add the analytical sensitivity and selectivity of mass detection to increase the efficiency of your analyses. Decades of Agilent innovation provide outstanding separation and mass detection for clear insight into your results.

#### **Instrument efficiency**

Make every day more productive with features such as ultrafast ion polarity switching, rapid scanning, powerful quantitation and reporting software. Should your needs change, you can easily upgrade from the LC/MSD to the LC/MSD XT without replacing an entire system.

#### Laboratory efficiency

Choose comprehensive analytical LC and MS technologies from Agilent to achieve a new level of system integration for compliance while lowering your total cost of ownership.

# InfinityLab and business efficiency

From routine analysis to cutting-edge research, our InfinityLab portfolio enables you to:

- Maximize the performance and efficiency of your LC workflows with the latest innovations.
- Reduce costs with more efficient lab operations.
- Easily identify the columns and supplies that work best with your Agilent LC instruments.

Learn about more InfinityLab products that can help maximize your lab's efficiency at www.agilent.com/chem/infinitylab



The Agilent InfinityLab portfolio of LC and MSD instruments instruments, columns, and supplies work together seamlessly for maximum efficiency.

### **RELIABLE, INTUITIVE SOFTWARE FOR CHROMATOGRAPHERS**

The Agilent OpenLAB Chromatography Data System lets you quickly create methods and analyze results on the InfinityLab LC/MSD Series systems. In fact, you can implement the highest standards of data integrity and automate time-consuming tasks to deliver fast and accurate results.

#### Mass detection made easy

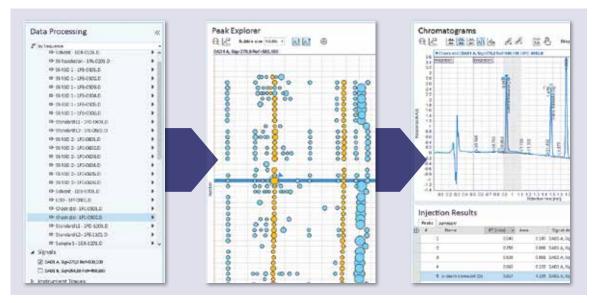
Chromatographers can quickly adopt mass detection with an intuitive user interface that is fully integrated with LC analysis and features the clean, uncluttered standards of today's software. Minimize the time and cost of training with on-demand videos and learning tools.

#### Quick, reliable answers

Simplify data analysis with visual tools like Peak Explorer that help you quickly identify outliers and artifacts. Speed up the processing and review of large data sets with a fast data processing engine and automated calculations.

#### **Consistent, efficient reporting**

Generate complex reports quickly and easily using customizable templates, intuitive drag-and-drop report creation, built-in custom calculation capabilities eliminating the need to export results into other software such as Microsoft Excel.



Peak explorer helps you quickly identify samples with missing or additional peaks.



### **QUALITY CONTROL AND DATA INTEGRITY**

Data integrity is a critical aspect of compliance for QA/QC laboratories.

Agilent takes compliance seriously. That's why OpenLAB CDS includes extensive technical controls to ensure data security and data integrity—minimizing the need for procedural controls. The software offers:

- Recording protection in a standalone workstation or networked environment.
- Audit trail review that includes confirmation and documentation as part of the electronic record.
- E-signatures that are permanently linked to their records and embedded in the final result.
- Access control enables you to assign privileges based on the type of user and the data they need to access.
- Built-in custom calculation and reporting capabilities keep all key data within the system eliminating errors caused by data export or manual transcription.

### **SYNTHETIC CHEMISTRY**

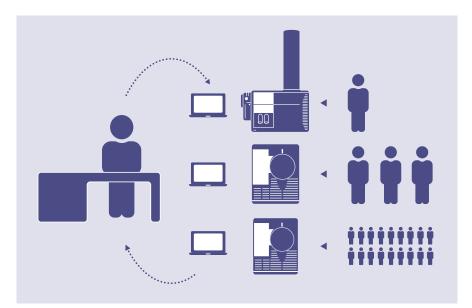
In modern drug discovery speed-to-decision is critical. This requires confident answers to everyday research questions with quick turn-around times. The proven robustness and reliability of Agilent's LC/MSD systems are ideally suited for use by the synthetic and medicinal chemist who needs to monitor the progress of synthetic chemistry strategies.

The latest evolution of open access software for LC and LC/MS users, Agilent MassHunter Walkup enables non-expert users to perform analyte-agnostic analysis for quick answers to routine questions. System software centralizes access to and administration of OpenLAB controlled LC/MS instruments for a wide variety of applications and analytes.

The Agilent MassHunter Walkup software allows multiple users to take full advantage of LC/MS capabilities. Simply input some basic information, choose an analytical method, and load samples. With MassHunter Walkup, a single administrator can easily manage many systems and applications with the ability to:

- · View instrument status remotely.
- · Add or modify methods.

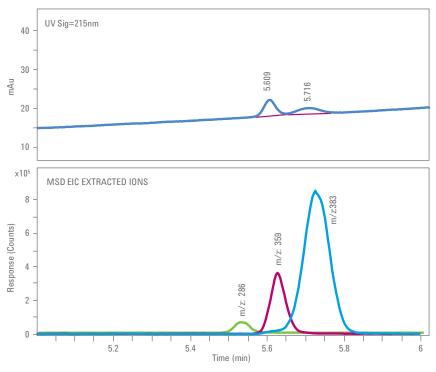
- Receive updates on system status via text or e-mail.
- Remotely take an instrument offline to conveniently manage scheduled maintenance for optimum laboratory operation.



A front-end to LC and LC/MS systems that allows investigators to submit samples without being experts in the technology with few instrument specialists who are responsible for multiple systems.

### **IMPURITY ANALYSIS**

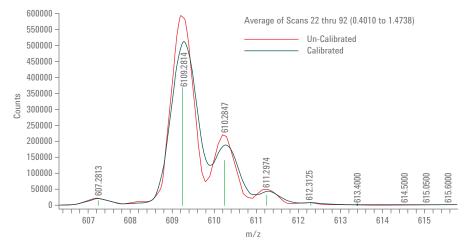
When profiling impurities, you may encounter challenging detection issues such as compound co-elution or components with poor UV absorbance. That's when data from the MSD can really boost confidence in your analysis, whether you are involved in drug discovery or guality control. What's more, Agilent OpenLAB CDS software gives you the ability to create and search compound libraries for added confirmation. The software's advanced technical controls also provide indispensable features that support data integrity.



Using mass detection to overcome the limitations of UV absorbance detection.

### **IDENTIFICATION OF UNKNOWNS**

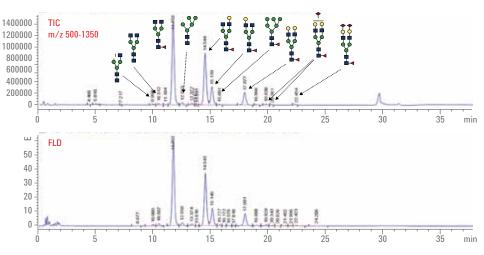
An Agilent InfinityLab MSD with MassWorks with increased mass accuracy by up to 100x, is a powerful, easy to use, and affordable tool for unknown formula identification of pure compounds in pharmaceutical, chemical, consumer product, food safety, and organic synthesis laboratories.



MassWorks' patented calibration technology dramatically improves both mass accuracy and spectral accuracy. In combination this provides confident unknown formula identification by using both accurate mass and exact isotope modeling.

### **SAMPLE CHARACTERIZATION**

Glycosylation plays a key role in the efficacy and safety of therapeutic antibodies. Complexity and increased regulatory demands are driving adoption of mass spectrometry for analysis of glycans. Mass data from Agilent LC/MSD systems adds another level of confidence in glycan profiling of biotherapeutic proteins.



Confirming the glycan profile with the benefit of molecular weight information.

### **COMPOUND QUANTIFICATION**

Due to concerns about our food supply, more food and beverage companies are looking for instruments with lower detection limits to boost confidence in characterizing raw materials and formulation. Mass selective detection has been adopted to lower detection limits beyond levels achieved using UV detectors.

Reliability, analytical sensitivity, and ease-of-use make Agilent LC/MSD systems ideal for ingredient analysis and quantification. For those who use MassHunter data analysis for LC/TQ, LC/(Q-)TOF, GC/MSD, GC/Q-TOF, and/or GC/TQ experiments, data can be automatically converted to the



Use mass selective detection to test food quality and authenticity.

MassHunter data format so that you can harmonize your approach to data analysis, reporting and integration with other laboratory software with MassHunter.

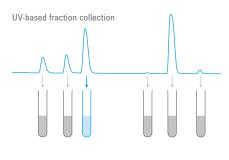
# **LC/MSD PURIFICATION SYSTEMS**

Streamline your drug development process with LC/MSD purification systems tailored to meet your laboratory's current and future needs.

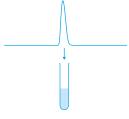
- Purify samples from milligram to multiple gram levels with our scalable flow-rate and capacity offering—both for number of samples and fractions.
- Our wide range of detectors for fractionation triggering, including mass-based detection, ensure that you achieve maximum purity and recovery.
- Automated calculation of focused gradient profiles for each target compound helps you achieve the highest purity and recovery.



LC/MSD purification systems for maximum purity and recovery.







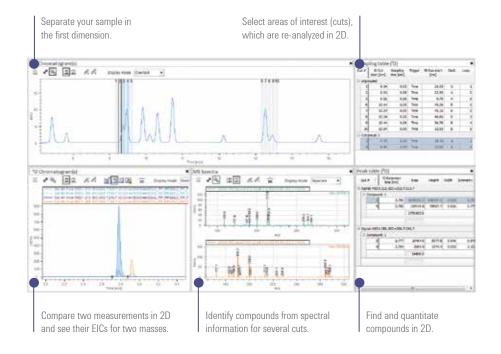
Mass-based fraction collection adds efficiency to purification.

### 2D-LC/MSD ANALYSIS

Combining the separation of 2D-LC and the specificity of mass selective detection is an excellent analytical methodology for identifying compounds in challenging samples like in impurity analysis or samples with high matrix load.

The second dimension can be used to either increase LC separation power or to remove, nonvolatile buffers to enable mass spec compatibility.

Agilent's unique 2D-LC software an add-on to OpenLAB CDS enables you to easily set up methods within seconds and to analyze 2D-LC/MSD data with Agilent's unique easy-to-use 2D-LC Viewer.



#### The Agilent Value Promise: 10 years of guaranteed performance

Agilent offers the industry's only 10-year value guarantee. We guarantee you at least 10 years of instrument use from your date of purchase, or we will credit you with the residual value of that system toward an upgraded model. It's our way of assuring you of a safe purchase now, and protecting your investment.

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