

# ACQUITY QDa II Mass Detector

## Advancing the Power of Mass Detection

Elevate Your Analytical Insights and **Press On** for Even **More**





# Identify Everything in Your Sample with Complete Confidence

Information-rich mass spectral data starts **here**

**Built on a solid foundation of groundbreaking technology, the ACQUITY™ QDa™ II Mass Detector provides even more efficiency and productivity of separations workflows, providing information-rich mass spectral data, ensuring compliance, and regulatory certainty.**

## Acquity™ QDa™ II



### SEE MORE COMPOUNDS

Greater compound coverage from an extended mass range to support small molecules, large molecules and new modalities. A complementary technique to analog detection for chemicals with no chromophores, ACQUITY QDa II Mass Detector enables you to confirm the identity and purity of more compounds with the power of mass detection.

### ANALYZE MORE SAMPLES

Robust, reliable and requiring no sample-specific adjustment. Simply power on to make informed decisions with the full picture of what's in your sample. Minimal maintenance along with system performance monitoring ensures maximum uptime.

### HAVE MORE CONFIDENCE IN THE ROBUSTNESS OF YOUR SEPARATIONS

The addition of mass detection to your method development workflow enables fast peak tracking and greater confidence in peak purity, for more robust separations. Combined with industry-leading AQB method development software, your lab can achieve unprecedented MS peak tracking functionality with the ACQUITY QDa II Mass Detector.

### STRIVE FOR MORE SUSTAINABILITY

Achieve up to a 70% reduction\* in energy consumption and heat output compared to other vendor's MS systems. The ACT Environmental Impact Factor Label\*\* -- available and published by My Green Lab -- provides clear, third-party verified information about the environmental impact of laboratory products, enabling you to make the most sustainable decisions for your organization.

\* See page 8 for more details on power consumption.

\*\* ACT - About ([mygreenlab.org](http://mygreenlab.org))

# Continuing to Separate Beyond Question

Ensure your laboratory is prepared for the **future**

## MORE PERFORMANCE

Plug and play performance with its intuitive design, complementary to optical detection with the robustness to handle all of your analyses. Working in harmony with your chromatography, it's pre-optimized to work with your samples, without the sample-specific or user adjustments typical of traditional mass spectrometers.

## MORE EFFICIENCY

The intuitive design of the ACQUITY QDa II Mass Detector provides additional data without cost or complexity. The most information you can get out of your separation for complete characterization. In synergy with optical detection, you can significantly reduce the chance that a sample component will go undetected helping to mitigate risk and ensuring a sound return on your investment.

## MORE SUSTAINABILITY

Purposeful innovation, a stackable mass detector that seamlessly integrates into existing workflows resulting in less bench space and more energy efficient. Minimal cleaning and routine maintenance ensuring maximum uptime. Compatible with green solvents ensuring reduced environmental impact.



THE ACQUITY QDa DETECTOR HAS BEEN SPECIFICALLY DESIGNED FOR CHROMATOGRAPHERS. IT IS AS EASY TO USE AS AN OPTICAL DETECTOR AND DOES NOT NECESSITATE SPECIFIC TRAINING OR EXPERTISE. THE DETECTOR IS WELL ADAPTED TO SPEED UP THE METHOD DEVELOPMENT PROCESS THROUGH EFFICIENT PEAK TRACKING AND MINIMIZES THE RISK OF COELUTION.



Davy Guillarme, PhD, Senior Lecturer, School of Pharmaceutical Sciences at University of Geneva, University of Lausanne.

- Simply power on, and you're ready to go
- Zero user set-up optimization, calibration, or adjustment
- Run your analyses – it just works
- When you're done, just power-off



# The Perfect Partner

Designed for **compatibility** with your chromatography

Meet all your chromatography requirements with Waters chromatography systems, including our dependability and flexibility ranges of HPLC systems, performance range of UPLC systems, and our purification and specialty systems.



## ACQUITY PREMIER

Designed with MaxPeak HPS Technology and offering true UPLC performance, the ACQUITY Premier System facilitates fast analysis times and improves resolution and sensitivity, even for your most challenging separations.



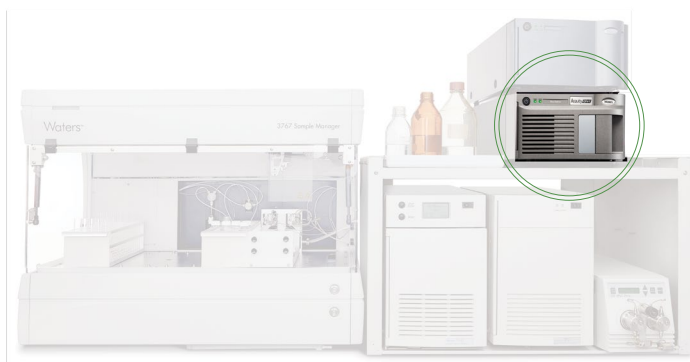
## ACQUITY ARC PREMIER

A modern, flexible HPLC platform designed with MaxPeak HPS Technology for robust method development and routine testing applications.



## ACQUITY ADVANCED POLYMER CHROMATOGRAPHY (APC)

Achieve the highest resolution size-based separations for polymer and oligomer characterization, within short analytical run times.



## AUTOPURIFICATION™ LC PREP

High efficiency analytical and preparative chromatography of milligram to multigram quantities, on a single, high throughput HPLC platform.



## ACQUITY UPC<sup>2</sup> SYSTEM

Complimentary to both LC and GC, the ACQUITY UPC<sup>2</sup> convergence chromatography system provides the separation power of normal-phase chromatography with the ease-of-use of reversed-phase LC.

For the full range of compatible separations systems, please talk to your local Waters representative.



# Effortless Integration

Achieve more with **flexible** software solutions

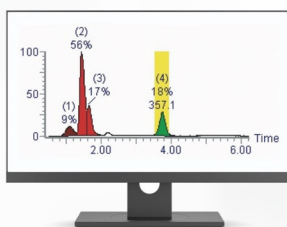
Process, Interpret, visualize, and compare the most complex data, and turn it into meaningful information quickly and simply. With integrated optical and mass detector data processing workflows, you can also analyze mass spectral data in the same way as you do photo diode array (PDA) data.

The ACQUITY QDa II Mass Detector is fully compatible with Masslynx™ Software and its suite of data processing application managers. Empower™ Software, our industry-leading chromatography data software platform is also fully compatible providing the ultimate flexibility.



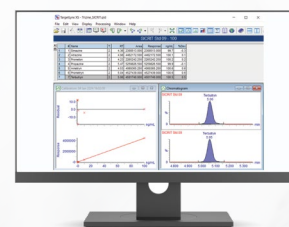
### OpenLynx™ OPEN ACCESS APPLICATION MANAGER

Walk-up open access simplifies interaction with the mass detection system.



### FractionLynx™ APPLICATION MANAGER

Manages and automates your purification process.



### TargetLynx™ XS APPLICATION MANAGER

Automates data processing and reporting for quantitative results.



### EMPOWER CHROMATOGRAPHY DATA SYSTEM (CDS)

Simplifying the way you collect, manage, and report chromatography test results is critical to your lab efficiency. With a suite of flexible functionalities that grows to meet your changing quality, business, and laboratory needs, Empower CDS has been purposefully designed to help you address your most demanding chromatographic, regulatory, and networking challenges.



### EMPOWER LAB MANAGEMENT SYSTEM (LMS)

Automating your lab workflow, from sample creation to data archival, is critical for maintaining data integrity and enhancing productivity. Manage your data all from a single, simple dashboard for an integrated approach to your product lifecycle management so you can reduce transcription errors, increase efficiency, and maximize data durability.



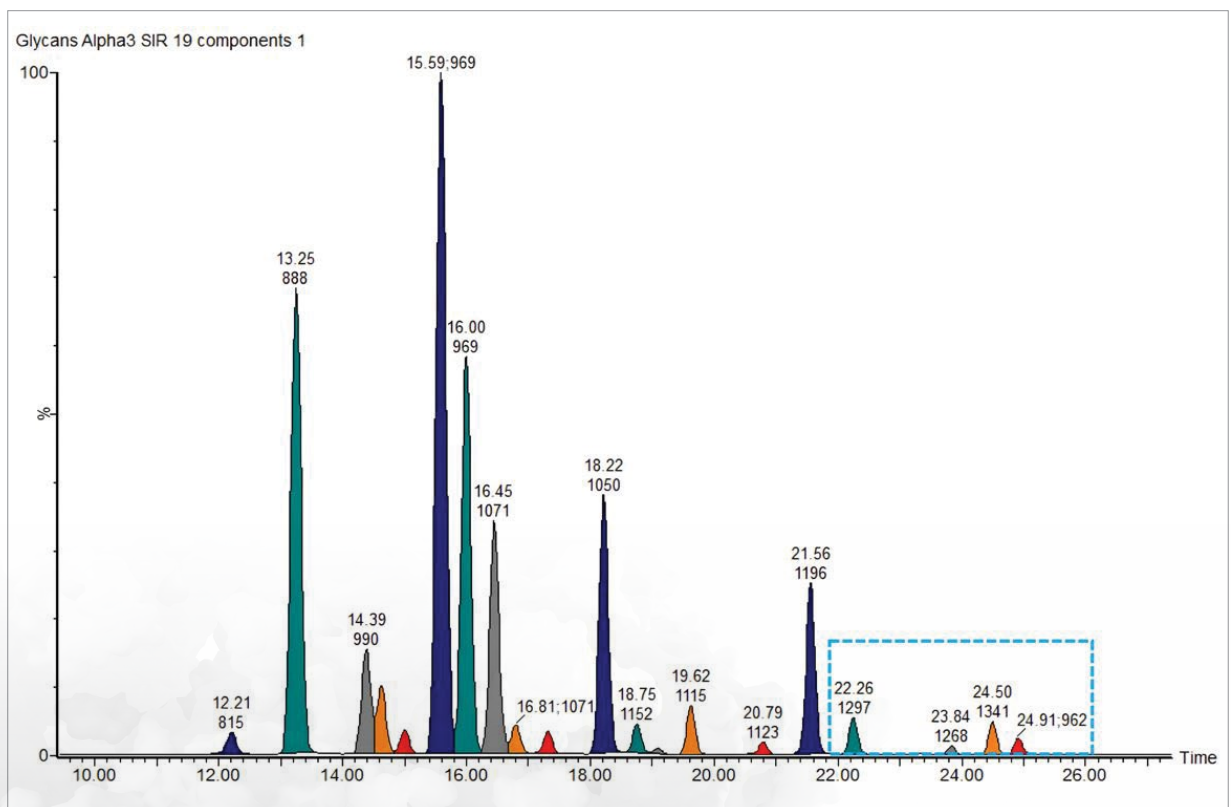
### waters\_connect™ SYSTEM MONITORING

Monitor all Empower Software-controlled chromatography systems remotely, at any time, from anywhere. Dynamically plan laboratory activities, monitor the status of your laboratory and maximize productivity. Troubleshoot and respond to errors faster, increasing system uptime.

# Identify More in Released Glycan Analysis

Unlock the full **potential** of your QC glycan testing

While non-MS methods offer routine QC capabilities, they fall short in delivering the detailed characterization, crucial for biopharmaceutical development. The ACQUITY QDa II Mass Detector with extended mass range revolutionizes routine analysis, offering accurate QC monitoring of N-glycan species with speed and precision. Coupled with Waters chromatography systems, enjoy enhanced MS response with uniform charge state for accurate quantitation, enabling scrutiny of released N-glycan profiles in under 40 minutes per sample. Complement fluorescence (FLR) detection and embrace reproducible, quantitative separation for rapid decision-making.



*Selected Ion Recording (SIR) chromatogram of doubly charged components of a glycan sample. Highlighted additional components identified as a result of the extended mass range.*

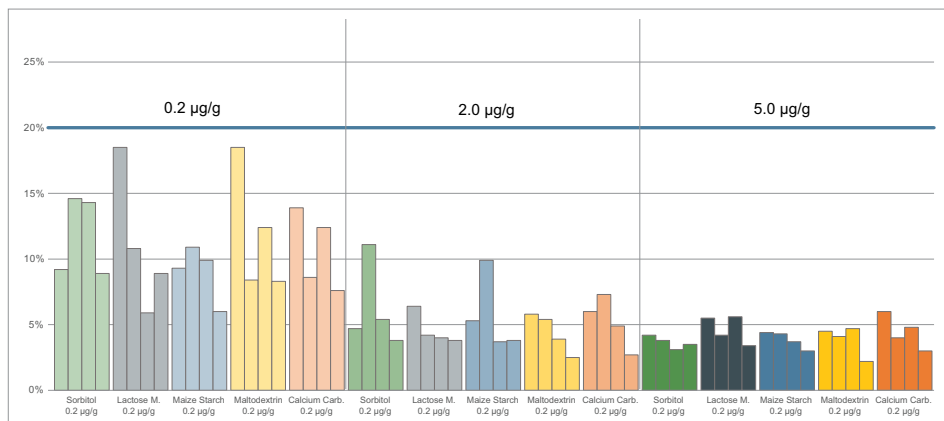


# Unparalleled Robustness for More Qualitative and Quantitative Performance

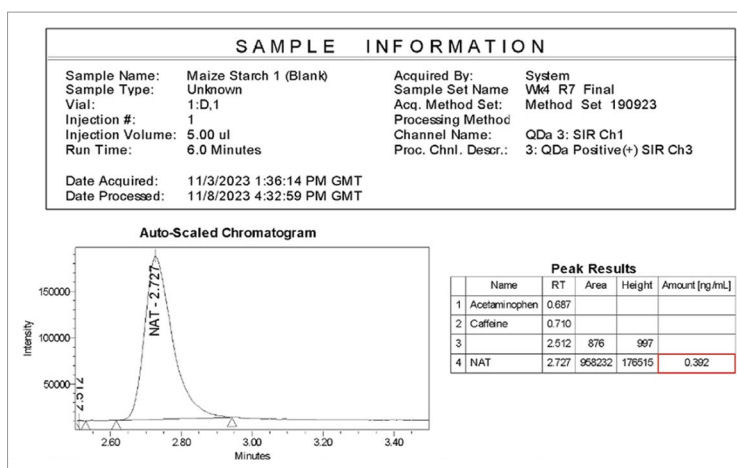
**Reduce** the risk of genotoxic impurities formation in drug manufacturing

Support risk assessment through routine monitoring of excipients and raw materials in drug manufacturing. Accessible, regulatory compliant-ready LC-MS solutions provide an efficient and cost-effective approach in mitigating the risk of impurity formation during the manufacture of drug product. Nitrite, a critical risk factor in N-Nitrosamine formation, presents as an impurity in pharmaceutical excipients, often in parts per million (ppm). The ACQUITY QDa II Mass Detector is a robust and reliable solution for routine analysis of nitrite in excipients. With automated resolution, tuning, and calibration during start-up, the ACQUITY QDa II Mass Detector eliminates the need for analyst intervention, ensuring seamless operation and precise results every time.

Empower CDS reporting functionality offers simple reviewing of excipient nitrite concentration within a sample batch. This allows for fast and comprehensive decision making, while ensuring compliance and data integrity within your laboratory.



Over 29 days of rigorous testing, it flawlessly executed approximately 6000 injections with minimal downtime.



Example of Empower CDS generated data report for nitrite content in a maize starch sample.



MS IS A SOPHISTICATED TECHNIQUE, BUT THE QDa MASS DETECTOR IS EASY TO WORK WITH, AND WE SEE THAT AS THE FUTURE FOR US.



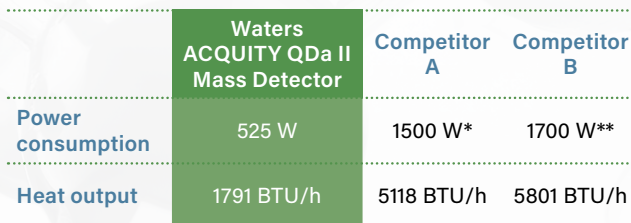
Mr. Marius Kurowski, Analytical and API Expert at Polpharma.

# Improving Efficiency with a More Sustainable Mass Detector

**Low** operational costs and environmental footprint

**As a leading technology innovator in chromatography, mass spectrometry, and thermal analysis instruments and software, Waters shares a common mission with our customers: to leave the world a better place than we found it.**

Many of our customers are actively working to address environmental sustainability in balance with the need to continually reduce operational costs. Waters has addressed these challenges by providing an instrument with low electricity consumption and BTU/hr output – lessening the need for air conditioning and lowering costs.



	Waters ACQUITY QDa II Mass Detector	Competitor A	Competitor B
Power consumption	525 W	1500 W*	1700 W**
Heat output	1791 BTU/h	5118 BTU/h	5801 BTU/h

\* From competitor A Specification Sheet.  
\*\* From competitor B Site Preparation Checklist.

## AUTOMATION PORTAL

Maximize lab efficiency with the Automation Portal.



# Unrivaled Support

Ensure your **success** with world-renowned services

**Waters Service and Support helps maintain system peak performance, minimize downtime, address scientific application challenges, and support stringent compliance requirements.**

Waters award-winning consistent quality support, professional services, and education ensure your success wherever your laboratory is located in the world. With Waters service and support offerings\* for your ACQUITY QDa II Mass Detector, you can:



## GET UP AND RUNNING QUICKLY

Get the onsite training and consultation you need to integrate the ACQUITY QDa II Mass Detector into your laboratory and assist with data migration and method transfer needs with Waters Professional Services.

## MEET YOUR LAB'S UNIQUE REQUIREMENTS

Protect your instrument investment with the comprehensive portfolio of service plans from Waters FlexCHOICE™, which provides access to the most in-depth and up-to-date knowledge of the advanced science and technologies within Waters systems.



## FACILITATE COMPLIANCE

Simplify the process of qualification, and record-keeping so that your business can focus on delivering products to market with Waters Compliance Services – so you can meet the regulations in your industry and in the countries where you conduct business.

## REDUCE TOTAL COST OF OWNERSHIP

FlexCAPITAL™\*\* is designed to support continuous laboratory operation while satisfying the budgeting challenges of a constantly shifting landscape. Minimize total cost of ownership while optimizing instrument performance and protecting your organization from security risks associated with outdated software platforms.



## LEVERAGE YOUR EXISTING TECHNOLOGY

With the FlexUP™ Technology renewal program, you can upgrade your older single quadrupole mass spectrometry system to the ACQUITY QDa II Mass Detector -- improving performance, results, and productivity while controlling costs and mitigating compliance risk.



\* Availability of offerings varies by country. Contact Waters or your local Waters representative for details

\*\* FlexCAPITAL payment plan options and availability may vary by country. Other restrictions may apply. Contact Waters or your local Waters representative for details. Subject to Credit Approval.

# Vouchers are available in three different values, adjusted to match your location and currency.

# Robust and Reliable from the Original Mass Detection Innovator

A full range of systems to meet your mass detection **needs**

Meet our mass detection product portfolio from direct point of need through to routine accurate mass detectors.



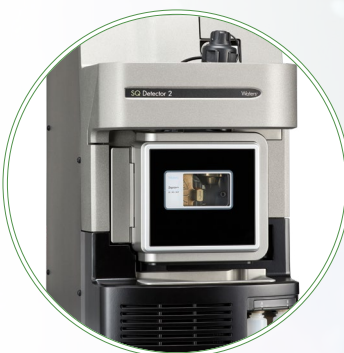
## RADIAN ASAP

Direct Mass Detector combines flexibility, ease of operation and speed without the need for complex sample preparation or chromatographic separation or extensive MS experience.



## ACQUITY QDa II MASS DETECTOR

Provides analytical chemists and chromatographers with complementary orthogonal mass detection. Identify more components within their sample with confidence.



## SQ DETECTOR 2

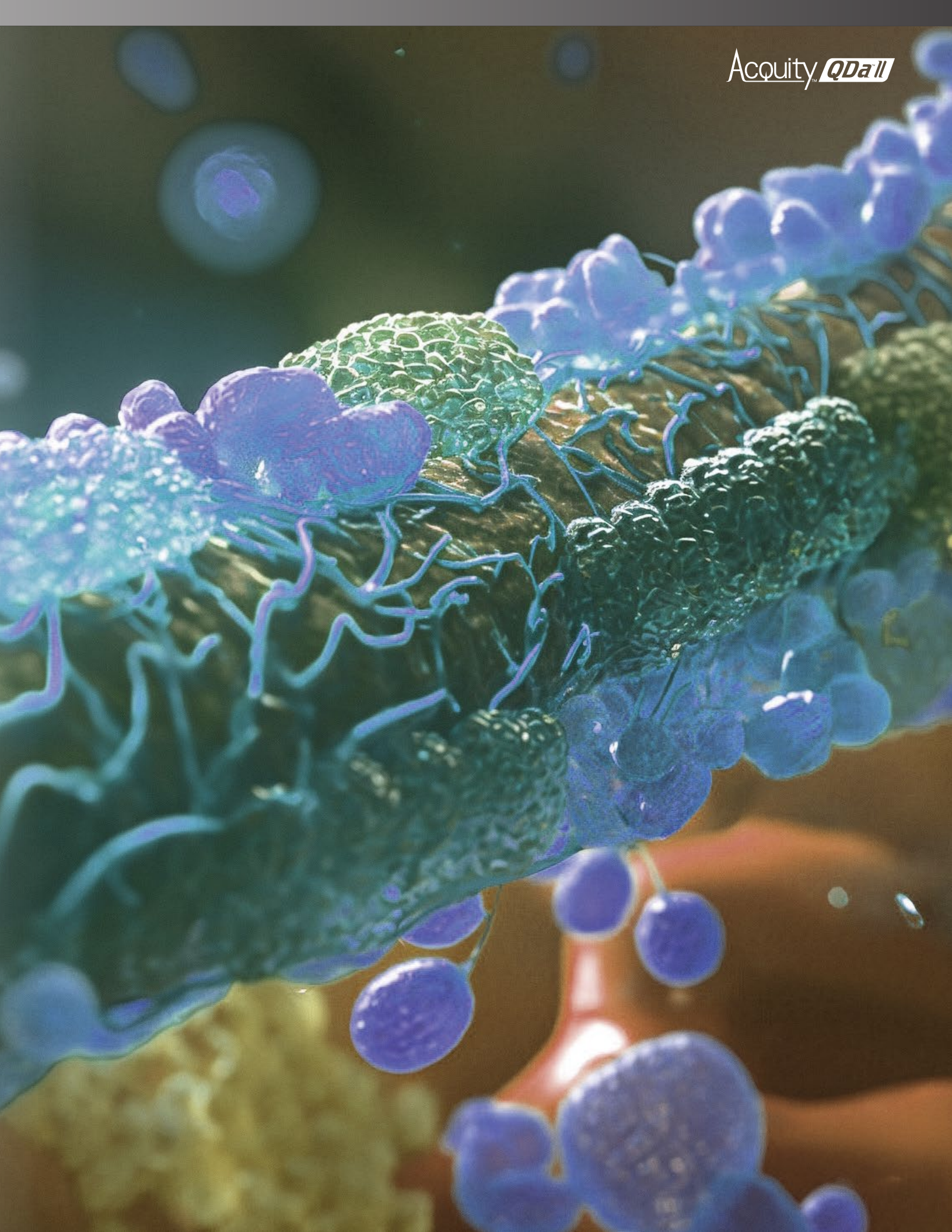
The ultimate single quadrupole mass detector for chromatography, compatible with the broadest range of chromatography platforms and ionization sources. A wide mass range enables uncompromised analysis of both low and high molecular weight species.



## ACQUITY RDa DETECTOR

Delivers SmartMS to the masses. You can increase productivity, data confidence, and simplify routine accurate mass workflow with this intuitive, compact, compliance-ready, and high-resolution LC-MS system.







For your local sales  
office, please visit  
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# Waters™

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