



Advanced QTRAP®  
System performance –  
outstanding budget  
sensitivity

AB SCIEX 3200 QTRAP® LC/MS/MS SYSTEM

The AB SCIEX 3200 QTRAP<sup>®</sup> LC/MS/MS System offers the same **powerful, innovative features** that you've come to expect from the leader in life science mass spectrometry – along with **outstanding value** that puts true hybrid triple quadrupole/linear ion trap capabilities within the reach of any lab.



# Rewriting the price/performance equation

## Hybrid triple quadrupole/linear ion trap sensitivity and ease-of-use, plus triple quad selectivity

Patented hybrid triple quadrupole/linear ion trap technology takes you far beyond the capabilities of any conventional ion trap, enabling you to screen, identify, and quantitate proteins or small molecules in a single analysis. By combining true triple quadrupole scanning functionality with sensitive linear ion trap scans, you can reduce analysis time and get more information from every experiment.

### Versatile, integrated system meets multiple challenges

The compact benchtop system is a powerful, easy-to-use tool that's rugged enough for continuous high-throughput operation. With intuitive, application-specific software and a full complement of automation features, it fits seamlessly into the workflows of any drug discovery, proteomics, or forensics laboratory.

### Expert results – even for non-experts

From automated methods development to quick, simple ion source changes, the 3200 QTRAP® system is designed to make it easy for you to get the answers you need, even if you are just getting into mass spectrometry.

### Powerful, intuitive software

Powerful Analyst® and Cliquid® software make getting meaningful results easy. Application specific software automates acquisition and processing to find the answers you need and sort them out from the noise. Automated workflows can find expected or unexpected metabolites and confirm identification as well as provide structural information. Biomarker discovery workflows will identify putative protein biomarkers and quantitate them in a single run. Screening workflows enable multiple component analysis with confirmation as well as quantitation of closely eluting and co-eluting analytes.



# The advantages of an ion trap and the performance of a triple quad all in one

The 3200 QTRAP® LC/MS/MS system takes advantage of several proprietary mass spectrometry innovations to deliver outstanding quantitative and qualitative performance within a single system.

## Convenient “plug and play” ion sources

Rugged, reliable, easily interchangeable ion sources are available for a wide range of applications and flow rates to suit your analysis needs.

Rapid source change-over extends system flexibility with minimum downtime. All temperature, gas, and electrical connections are fully integrated into the source housing. There are no extra lines to attach – and no lost time. Magnetic connections automatically detect the hardware change and alert the software.

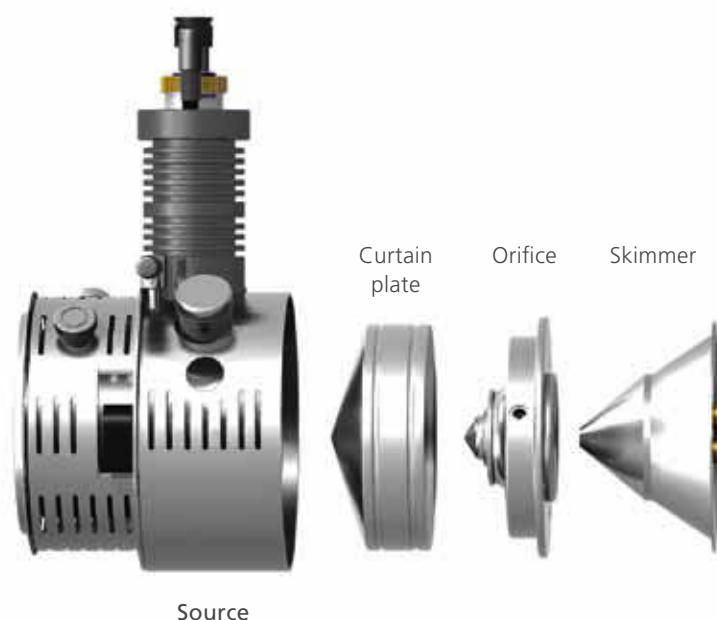
The innovative **Turbo V™** ion source efficiently ionizes compounds and virtually eliminates cross-contamination, even with large sample loads and LC flow rates up to 3 ml/min. Embedded ceramic heater technology and improved gas dynamics contribute to the system’s low detection limits, and enable high sensitivity quantitation over a wide range of flow rates. Quick-change TurbolonSpray® and APCI probes let you switch between ionization modes in seconds.



**Q0 trapping** Ions can be accumulated in the Q0 region of the system while the Q3 linear ion trap is scanning ions during ion trap MS/MS and MS3 scans. This results in a greatly improved duty cycle, as well as improved sensitivity. Patented collisional focusing technology maximizes ion transmission for superior sensitivity.

**Q2** Patented LINAC® high-pressure collision cell ensures maximum ion transfer—free of cross-talk—from the interface to the detector in MS/MS mode. You can reduce MRM dwell times without compromising sensitivity, allowing you to monitor more compounds without any appreciable loss in signal, and enabling simultaneous multi-compound analyses.

**Q3** Patented Q3 linear ion trap can accommodate up to 45X more ions than a 3D ion trap, providing greater sensitivity before the onset of space charge effects. The longer path gives ions more time to lose energy, further enhancing capture and sensitivity. Higher duty cycle and faster scan time provide more information in less time – and a more thorough investigation of complex samples.





DuoSpray™



PhotoSpray®

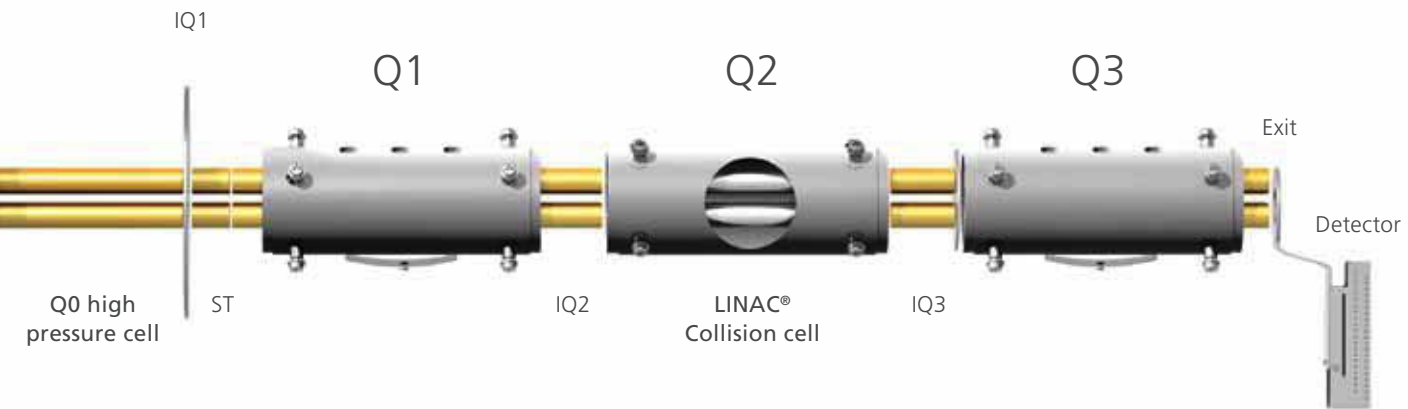


NanoSpray® II

The optional **DuoSpray™** source contains TurbolonSpray® and APCI probes in one housing with computer-controlled switching, allowing use of the optimal ionization technique and conditions for each compound during an LC run. It speeds up method development while also increasing throughput and data quality.

The optional **PhotoSpray®** source for atmospheric pressure photo-ionization (APPI), expands the range of compounds that you can analyze. The PhotoSpray source can ionize many compounds that are not easily ionized by ESI or APCI, such as low polarity polycyclic aromatic hydrocarbons (PAH's).

The **NanoSpray® II** source gives you the versatility of discrete nanospray and nanoflow HPLC capabilities using nebulizing gas-assisted MicrolonSpray® ion source for low flow work such as protein and peptide analysis. An improved interface permits more efficient transfer of ions from the NanoSpray source into the system, increasing robustness and sensitivity.

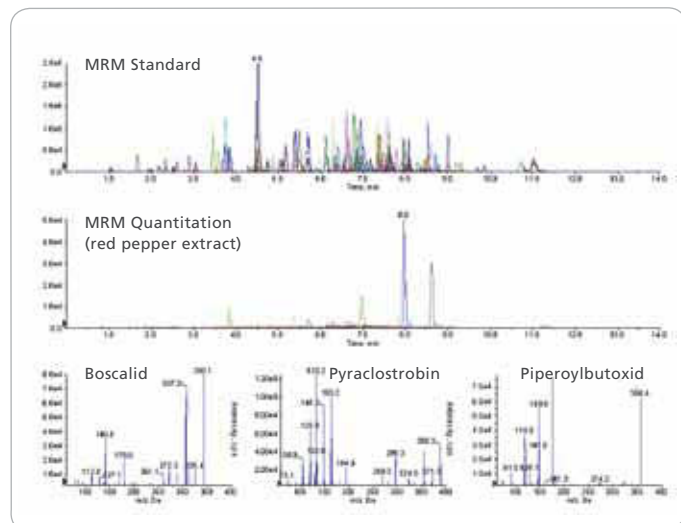


# Performance that's anything but entry level

The 3200 QTRAP® system gives you a level of performance and application versatility that you won't find in any other system in its price class.

## Simultaneous qualitative and quantitative analysis

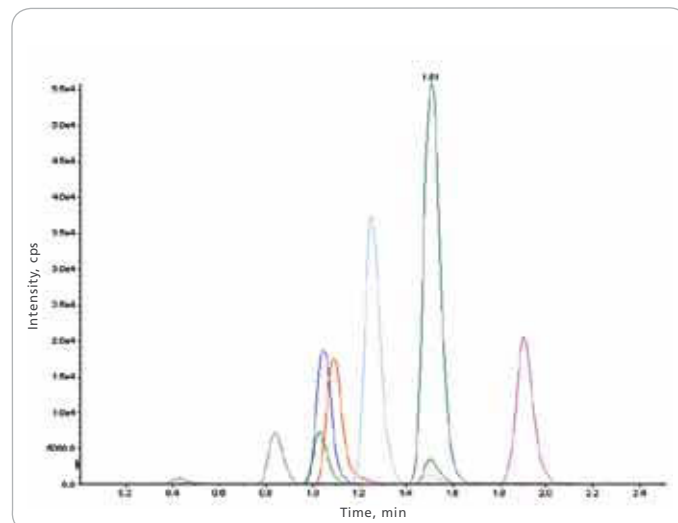
Hybrid triple quadrupole/linear ion trap technology provides the ability to identify and quantitate components from complex samples in a single run. Triple quadrupole specificity and quantitation combine with linear ion trap full scan MS/MS sensitivity for simultaneous qualitative and quantitative results.



AB SCIEX QTRAP® technology has the unique ability to quantify multiple components in a sample and obtain full scan MS/MS spectra for ID confirmation in the same run.

## Multi-compound analysis

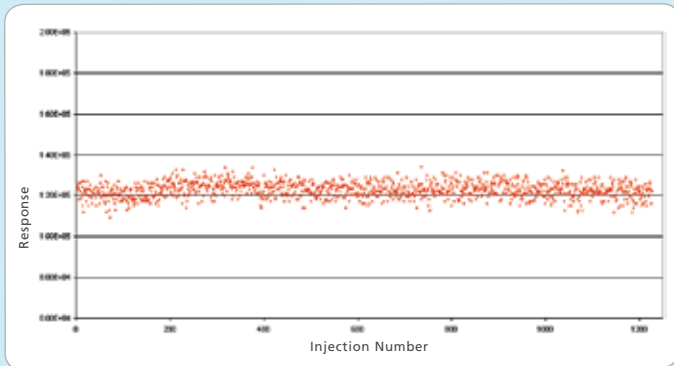
The ability to quantitate multiple components in a single run provides more results in fewer experiments. LINAC® collision cell technology enables fast scanning, with uncompromised performance. MRM scans provide confident distinction between closely eluting and co-eluting components.



Multi component capabilities enable screening and quantitation for broad classes of compounds, such as benzodiazepines.

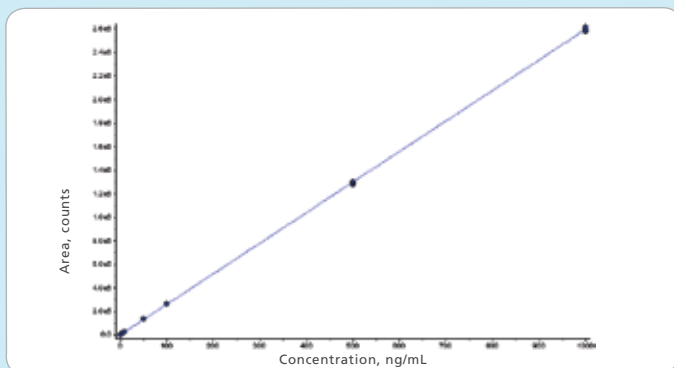
### Outstanding reliability for maximum productivity

Robust ion sources, advanced interfaces, and stable ion optics provide the ruggedness and reliability required for maximum instrument-up time and productivity from nano flow rates to 3 ml/min. Instrument and software stability provide consistent, confident results day after day.



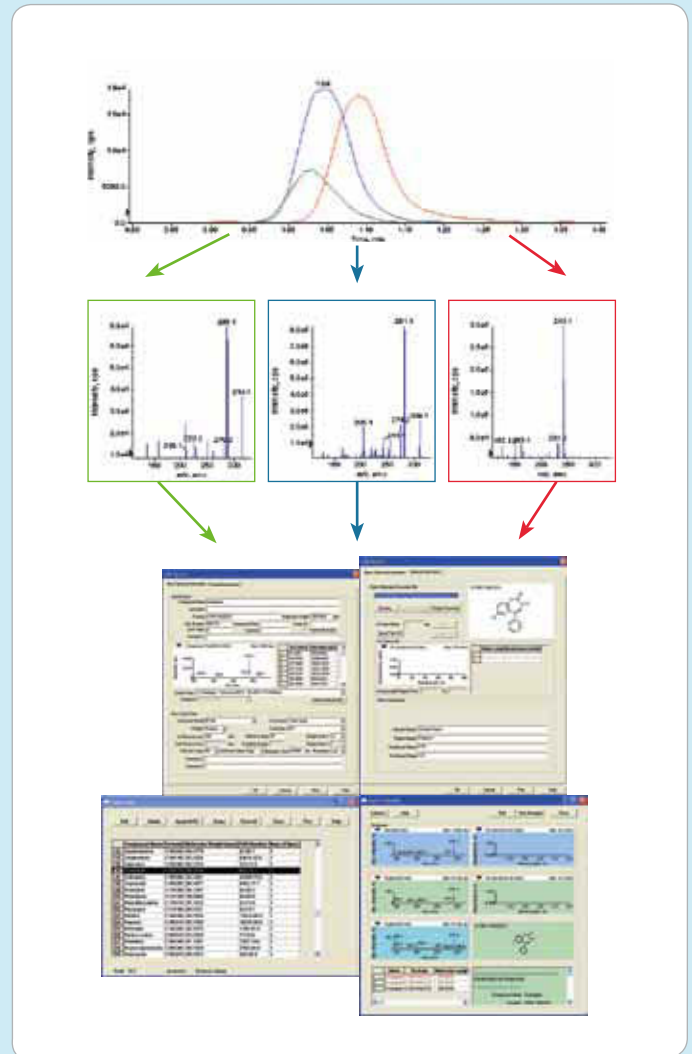
### True triple quad quantitation

With a linear dynamic range of four orders of magnitude, the 3200 QTRAP® system provides the quantitation performance that triple quadrupole LC/MS/MS systems are known for. The system performs multiple reaction monitoring (MRM) scans for highest quantitative sensitivity.



### More useful information from every experiment

Application specific software and the unique specificity of hybrid triple quadrupole/linear ion trap technology combine to provide automated workflows that deliver the most information from every experiment.



Detected peaks can be automatically surveyed by MS/MS for identification and compared to spectra from a library for ID confirmation.

# Your success is our success.

## We take it personally.

As an AB SCIEX customer you have access to a world-class customer support organization. Wherever you are, we're there with you as a trusted partner to answer questions, provide solutions, and maximize lab productivity.

The expertise of our service engineers covers the entire LC/MS system. Whether you need help with an ion source, an autosampler, or running an application, they can put your mind at ease. They understand that you can't afford downtime and need problems fixed fast. In fact, they do what it takes to make sure everything is working to your satisfaction and that your results look like they should.

Our application chemists specialize in making workflows flow. They can streamline your sample preparation and eliminate manual steps. They can help you develop methods for fast implementation and scale up for higher throughput. They can help you find ready-to-use iMethod™ Applications that get you up and running fast. They're also only a phone call away if you need help quickly.

When it comes to training, different labs have different needs. Our training specialists can design programs specific to your lab that make the experience as effective and efficient as possible. Choose from hands-on system training for LC/MS techniques or application-specific courses given by leading experts. You can also learn at your own pace with our e-learning modules.

Our customer support organization has access to the latest product updates, software revisions, methods and repair procedures to make sure that you stay on top of your game.

When you have questions, we have answers.

Learn more at [www.absciex.com/customersupport](http://www.absciex.com/customersupport)

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