Triple quadrupole power and performance,

at a single quadrupole price

API 2000™ LC/MS/MS SYSTEM

AB SCIEX

Advanced MS/MS capabilities in a surprisingly small footprint. The API 2000™ LC/MS/MS System from AB SCIEX brings the power and accuracy of tandem mass spectrometry to a wide range of applications. Designed for maximum reliability and ease of use in demanding high-throughput environments, this versatile, compact instrument offers tremendous LC/MS/MS capability in the space of a single quadrupole.

The technology of choice for a wide range of applications

Triple quadrupole MS/MS is one of the most sensitive and specific approaches for small-molecule quantitation. The fragmentation capabilities of tandem mass spectrometry also provide critical information for structural elucidation of unknown compounds.

Typical applications of the API 2000™ LC/MS/MS System:

Pharmaceutical

- High-throughput pharmacokinetic screening
- Metabolite identification
- Impurity profiling

Food & beverage

- Analysis of veterinary drug and pesticide residues
- Detection and quantification of disease agents and potential carcinogens

Environmental analysis

- Identification of agrochemical metabolites in environmental samples
- Quantitative analysis of contaminants in water, soil, and food

Forensic analysis

- Identification of toxins
- Quantitative analysis of forensic samples

Protein & peptide characterization

- Precursor ion and neutral loss scanning detection of target ions

With its exceptional sensitivity, automated methods development, and interchangeable ion sources, the rugged API 2000™ System makes it possible to analyze hundreds of samples per day. Patented atmospheric pressure ionization (API) technology and lab-proven engineering deliver superior performance for your most exacting analyses.

Technology that keeps your lab running at maximum productivity

A selection of easily interchangeable ion sources and flexible, intuitive software make it easy to integrate the API 2000™ System into your applications and lab workflow.

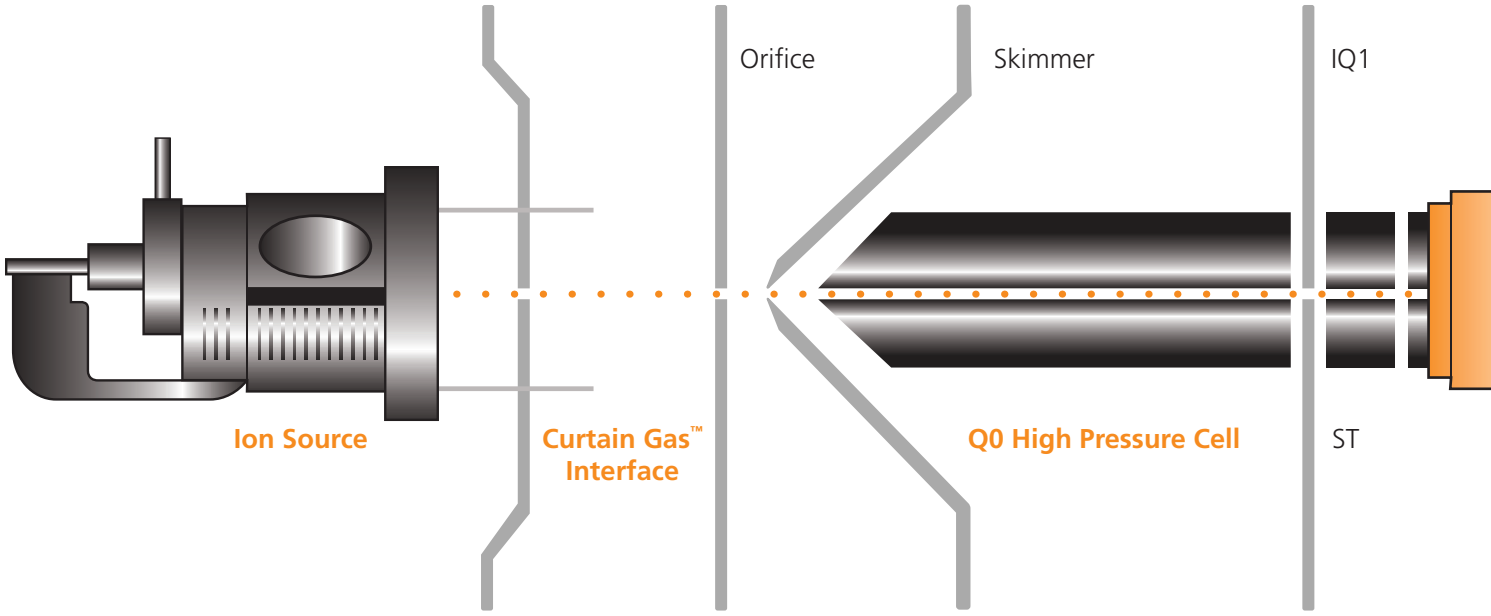
Convenient "plug-and-play" ion sources

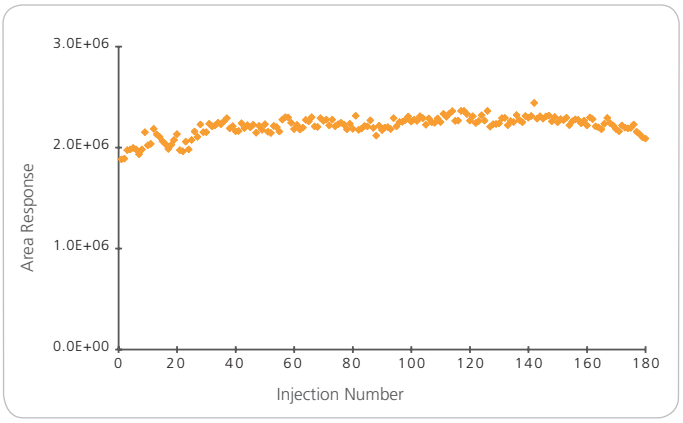
Rapid source change-over minimizes downtime and simplifies routine maintenance. All temperature, gas, and electrical connections are fully integrated into the source housing – no extra lines to attach and no lost time. Magnetic connections automatically detect hardware changes and adjust the software accordingly.

Robust and trouble-free

Robust ion sources on the API 2000 System allow continuous analysis of "dirty" samples that contain high concentrations of salt – with no degradation of performance.

Proven Curtain Gas™ Technology protects the interface and analyzer from contamination. Routine maintenance and cleaning require minimal tools, and all components are readily accessible for maximum uptime and productivity.

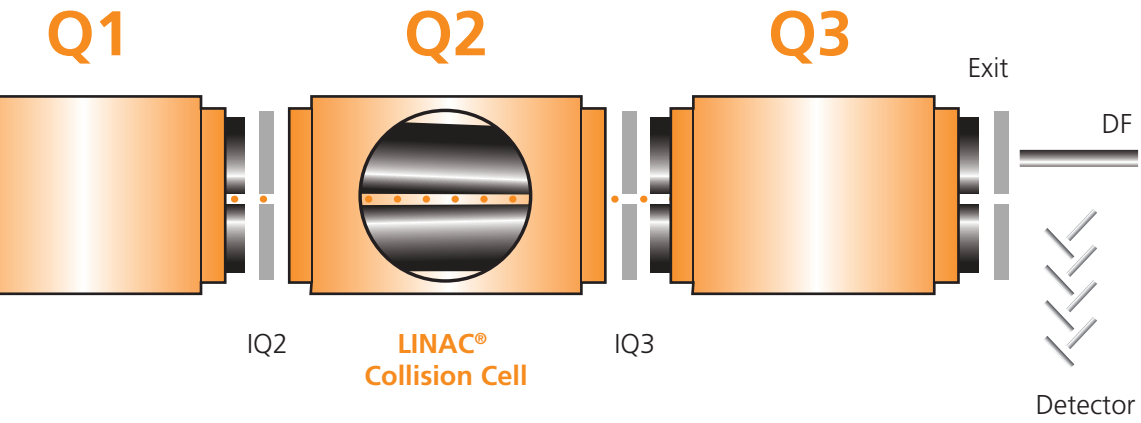




Injection: 25 µL injections of terfenadine in Hank's salt buffer solution
HPLC: C8 HPLC (2.1 x 50 mm) with gradient elution of 500 µL/min mobile phase directly (no split) into TurbolonSpray® Source on the API 2000™ System
No. of injections: 180 in 36 hours
Quantitation Method: External standard
C.V.: 6.4%

High sensitivity and reliability

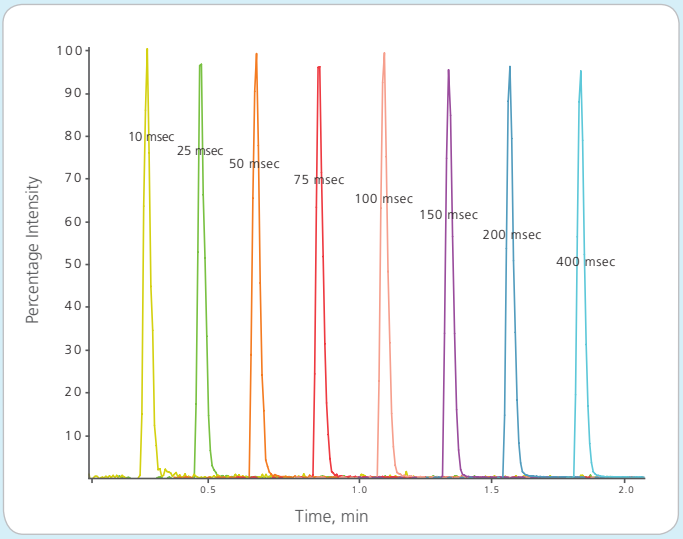
High-pressure collisional focusing in Q0 maximizes ion transfer from source to analyzer and ensures that even the most fragile compounds reach the analyzer intact. The system's broad dynamic range minimizes the need for sample concentration or dilution.




A
B
LOAD
INJECT
LIQUID WASTE
INSTRUMENT STATUS
READY
FAULT

LINAC® Collision Cell

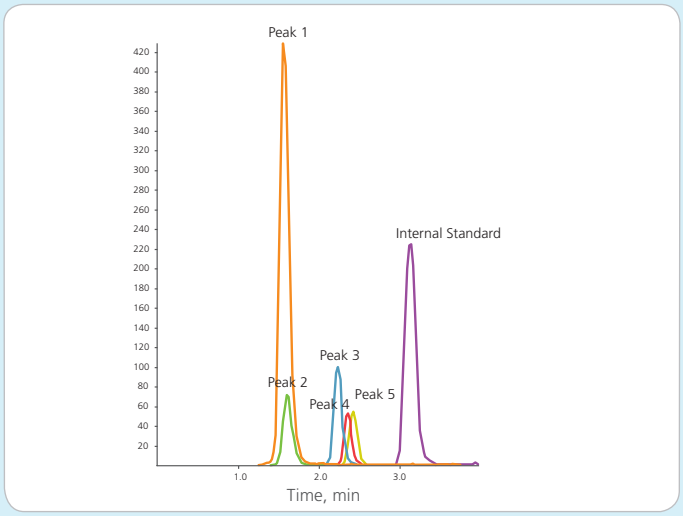
The patented LINAC Collision Cell ensures exceptional sensitivity and performance in all modes of MS/MS operation – including multiple reaction monitoring (MRM), neutral loss, and precursor ion scan modes. By allowing you to reduce MRM dwell times without compromising sensitivity, the LINAC Collision Cell significantly increases the number of compounds you can measure per analysis.



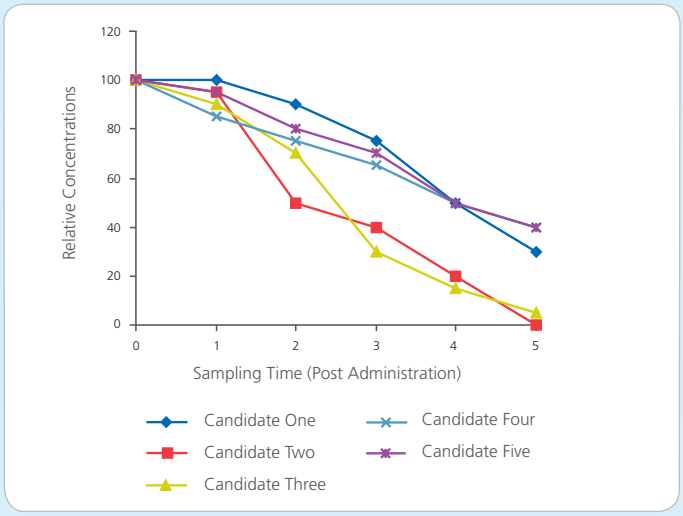
Reducing dwell times has no effect on the sensitivity of the ABI 2000™ System, as demonstrated here by repeat injections of selegiline.

Optimized for high throughput

Automated methods development and data processing make the API 2000™ System ideal for unattended, high-throughput, quantitative analyses.



High-sensitivity MRM methods developed for five candidate drugs and their internal standard.



The API 2000™ System is ideal for fast determination of early pharmacokinetics of candidate compounds.

You invest in our technology. We invest in your success.

As the world leader in mass spectrometry, AB SCIEX solutions are backed by the industry's most extensive service and support organization. With a network of service professionals, experienced compliance specialists, and over 150 PhD application scientists worldwide, we are dedicated to supporting your technical needs and helping you get the most out of your AB SCIEX systems.

AB SCIEX service professionals are recognized as the most highly qualified in the industry. They are certified on our instrument platforms through a rigorous 4-step certification program, with re-certification occurring every two years. This award-winning program helps to ensure that you receive the most efficient, highest-quality, and most up-to-date service available for AB SCIEX products and technology. Choose from flexible service plans and a variety of services for the right level of support for your laboratory's needs and budget.

Our customer support network is available to provide expert assistance in the use and application of AB SCIEX products through a comprehensive range of services, including application support, technical service, and training.

Whether you access our service and support team by phone, email, on-site visits, or through our innovative remote monitoring technology, you can be confident that the AB SCIEX organization will be there for you.

For more information, visit www.absciex.com

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