

# ExionLC 2.0 and 2.0+ systems

Precision, analytical, high-flow LC technology

---

The ExionLC 2.0 and 2.0+ systems deliver the reproducibility, reliability and carryover performance your workflow demands– injection to injection, batch after batch.

The ExionLC 2.0 system has full integration, control and compatibility with the SCIEX mass spectrometer portfolio. Bringing the speed and precision you expect from SCIEX, the ExionLC 2.0 system provides a complete solution to meet the challenges and opportunities your laboratory faces.



# SCIEX innovation with extraordinary world leading precision

The ExionLC 2.0 and ExionLC 2.0+ systems are built on the same legacy of innovation as all SCIEX products, delivering precision and robustness with the assurance of quality and support you would expect from the leader in the quantification of molecules.

## Environmentally friendly

- Phenomenex SecurityCap system
- Lab air quality/safety
- No solvent vapors

## Optional wash system module

- Enhanced carryover management
- Ultimate flexibility for challenging applications

## Autosampler

- Excellent injection linearity and reproducibility
- Multiple injection options
- Scalable Injection volumes 0.5 - 1,000µL
- Precise temperature control
- Simple to use and maintain

## UHPLC pumps

- Automatic purging capability
- Integrated 4-channel degasser, standard
- Integrated solvent selection valve, standard

## Integrated software

- Fully integrated with SCIEX OS software
- Direct control and enhanced layout
- Analyst software compatibility

## Switching valve

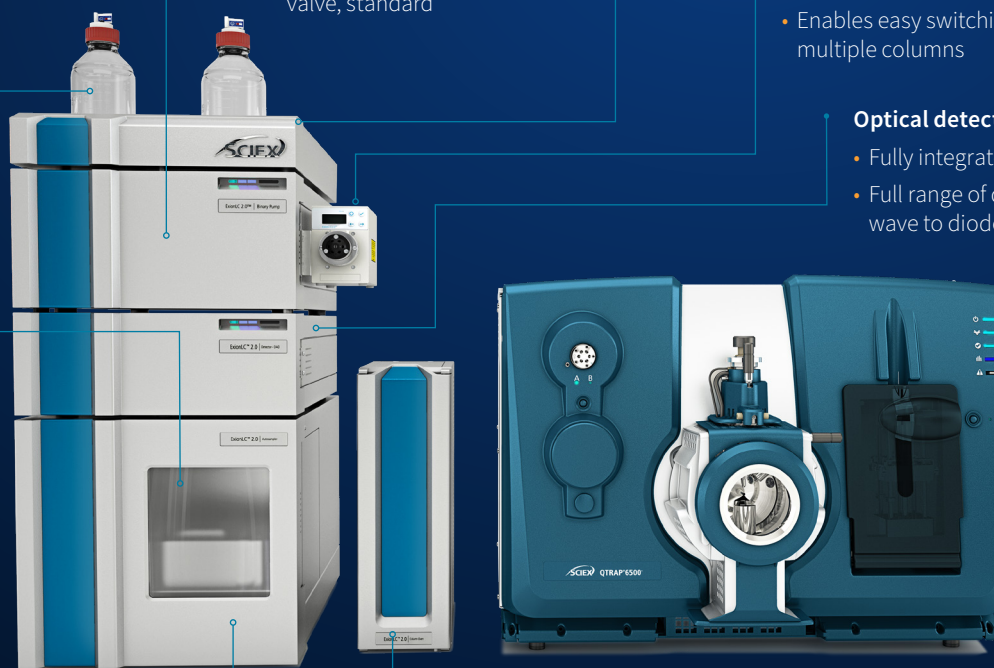
- Optional switching valves
- Enables easy switching between multiple columns

## Optical detector options

- Fully integrated with the MS solution
- Full range of detector options from multi-wave to diode-array detection (DAD)

## Column oven

- Column oven included, standard
- Temperature control down to 5°C
- Store up to 8 columns



[SCIEX.com/exionLC](https://www.sciex.com/exionLC) →

# Optimal performance, ultimate flexibility



## The ExionLC 2.0 system is an ideal solution for a wide range of workflows

Configured with a high-pressure binary pump capable of 12,500 psi, integrated four-channel degasser and solvent selection valve as standard, the ExionLC 2.0 system is an affordable solution for most applications.



## The ExionLC 2.0+ system delivers advanced precision for challenging applications

For liquid chromatography separations, this fully-configured UHPLC system is designed to deliver up to 5 mL/min at 18,000 psi with ease. From method development to routine projects, the ExionLC 2.0+ system will meet your needs.

### Optional wash system

The wash system provides reassurance that when those overloaded, contaminated and really tricky samples are presented for analysis, the system purges and aggressively washes the key components within the system to reduce the potential for carryover into the next sample. With the flexibility to wash inside the autosampler tubing and perform an aggressive wash of the outside of the sample needle, the system uses up to 8 different solvents at different flow rates, with the added capability to perform an autosampler valve rinse, if required.

KEY SYSTEM FEATURES	EXIONLC 2.0 system	EXIONLC 2.0+ system
HPLC/UHPLC performance	12,500 psi (860 bar)	18,000 psi (1240 bar)
Flow rate range	0.001 to 2 mL/min (5-860 bar), linear reduction to 400 bar from 2.01 to 5 mL/min	0.001 to 5 mL/min (0-1240 bar)
Max flow rate	10mL/min (5-400 bar)	5mL/min (0-1240 bar)
LC flow delivery	Constant flow and constant pressure delivery	Constant flow delivery
Integrated degasser	4 channel	4 channel
Integrated solvent selection	2x2	2x2
Column oven	Up to 8 x 12.5 cm columns	Up to 8 x 12.5 cm columns
Carryover performance	<0.0015% (partial loop >5 µL)	0.0015% (partial loop >5 µL)
Detector options	PDA, high sensitivity PDA and MWD	PDA, high sensitivity PDA and MWD
Pump options	Quaternary pump (860 bar max)	N/A



# Seamless integration with SCIEX OS software

The ExionLC 2.0 and ExionLC 2.0+ systems are fully integrated into SCIEX OS software. With simple-to-use, direct control access and real-time readbacks for each module, you know what the system is doing at all times. New solvent level monitoring helps ensure that you never run out of solvent and avoid wasting precious samples. Easy batch setup, method processing and customizable flagging rules in SCIEX OS software enable a fully automated workflow from acquisition to processing.

## **Straightforward LC method setup**

SCIEX OS software allows you to choose your flow program: isocratic, simple gradient, or a custom program. Streamline your method changeover and avoid over-pressurizing the pumps by selecting the auto-purge function.

## **Reduce carryover**

Advanced rinsing setup becomes easy, minimizing carryover with multiple wash solutions and extended needle wash capabilities, all clearly laid out for customization.

## **Flexibility for each application**

Several rack options and multiple injection modes for the autosampler provide the flexibility to identify the best mode for a particular application.

## **High performance with large-volume injections**

Easily select the use of headspace pressure to compensate for negative pressure in the vial. Get reproducible retention times by programming column oven temperatures, tolerances, and equilibration times.

## **UV-Vis detector support**

Fully integrated support for a comprehensive range of UV-Vis detectors with simple and intuitive setup in SCIEX OS software.

## **Increase productivity**

Increase efficiency with a single software solution that is user friendly from acquisition to reporting and straightforward to learn and implement in a laboratory environment.

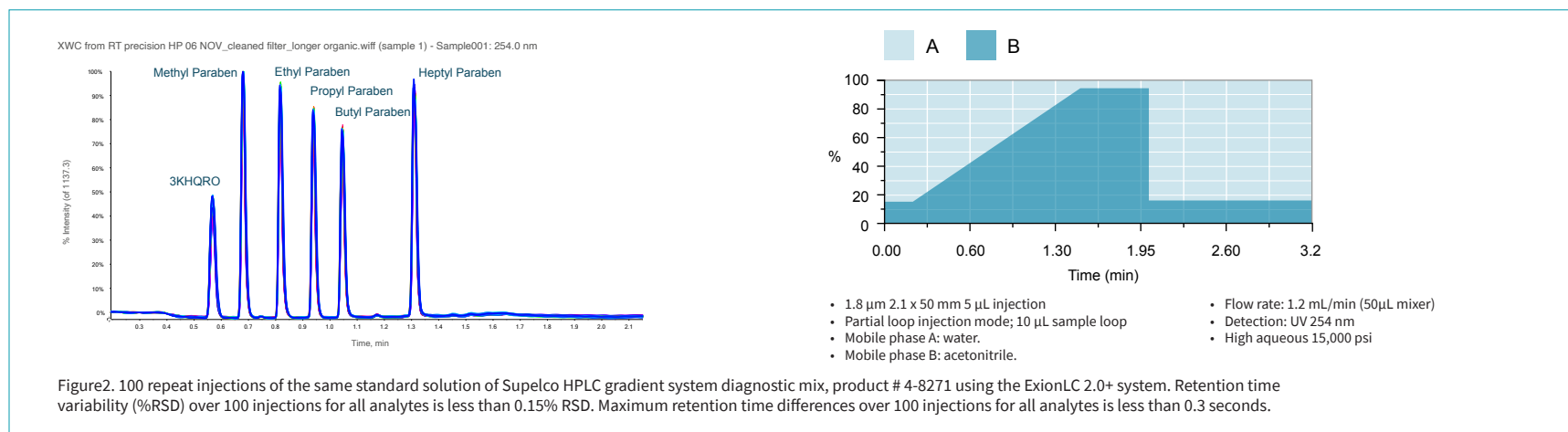
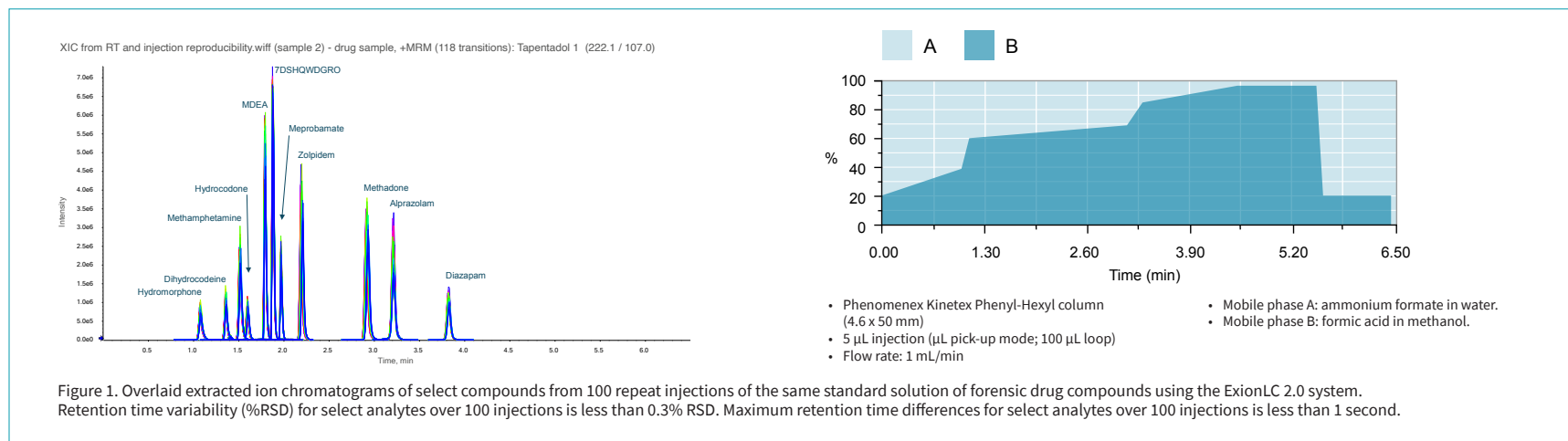
## **Quickly drill down to the critical information**

With an intuitive user interface, powerful integration algorithms and automated processing, you can easily drill down to critical information to make informed decisions quickly.



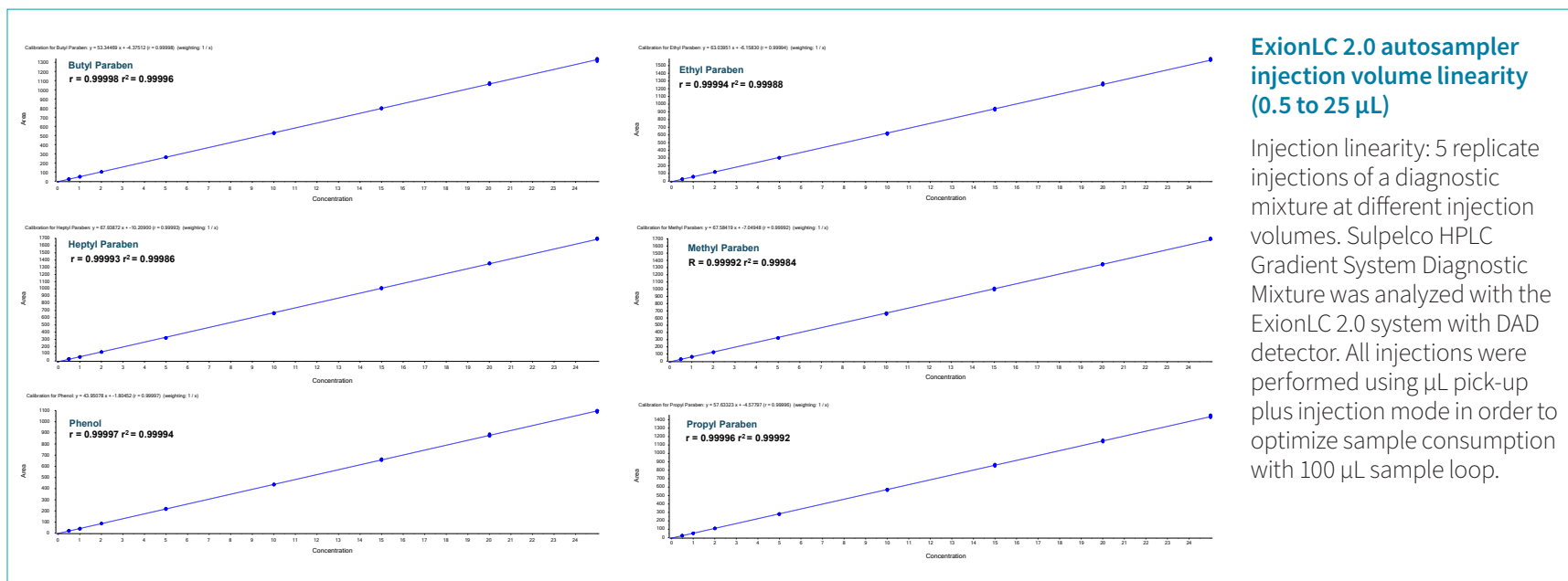
# Reproducibility you can rely on, injection to injection

Designed to provide enhanced stability, the innovative design of the high-pressure pumps helps ensure the same reproducible and accurate results, day after day. The ExionLC 2.0 and 2.0+ systems deliver retention time precision, with stable solvent flow delivering less than 0.3% RSD retention time variation. The high-pressure, dual serial piston pump is rated to 860 bar at flow rates of 0.001 to 2 mL/min for maximum flexibility.



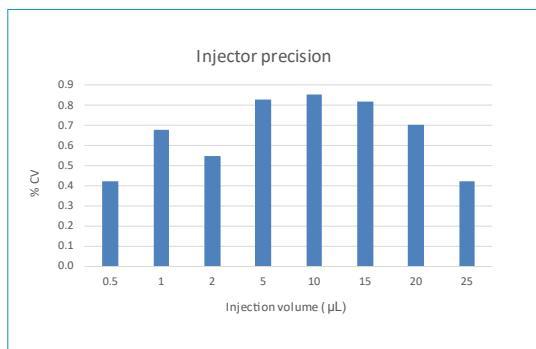
# Injection precision and linearity

Simplicity and flexibility of design provide the ability to easily switch between injection modes to optimize precision and accuracy performance for your assay. Achieve quantification results with injection linear coefficient of determination performance ( $r^2$ ) > 0.999 and precision <1% coefficient of variation for injection volumes from 0.5 to 50  $\mu\text{L}$  for most compounds (0.5 to 25  $\mu\text{L}$  for all compounds).



## ExionLC 2.0 autosampler injection volume linearity (0.5 to 25 $\mu\text{L}$ )

Injection linearity: 5 replicate injections of a diagnostic mixture at different injection volumes. Sulpelco HPLC Gradient System Diagnostic Mixture was analyzed with the ExionLC 2.0 system with DAD detector. All injections were performed using  $\mu\text{L}$  pick-up plus injection mode in order to optimize sample consumption with 100  $\mu\text{L}$  sample loop.



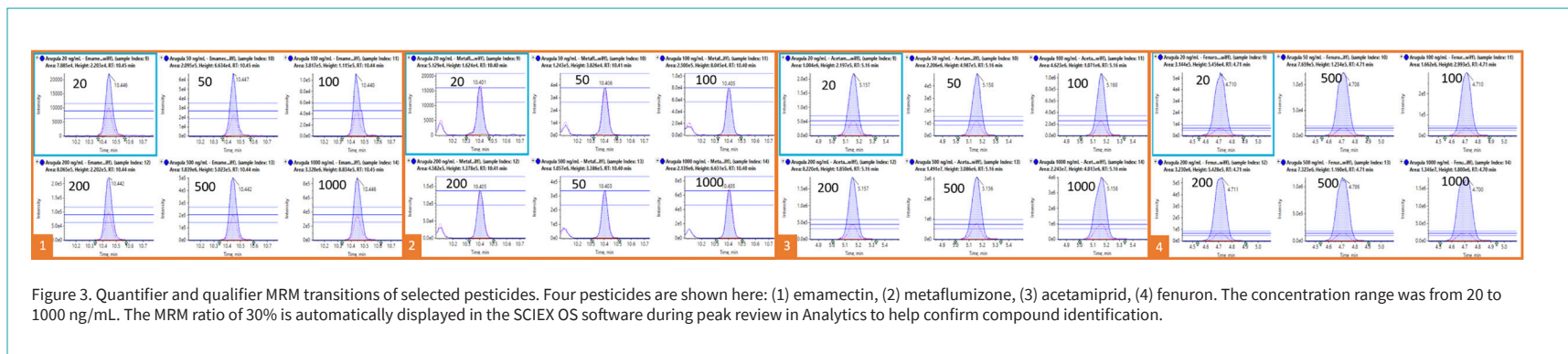
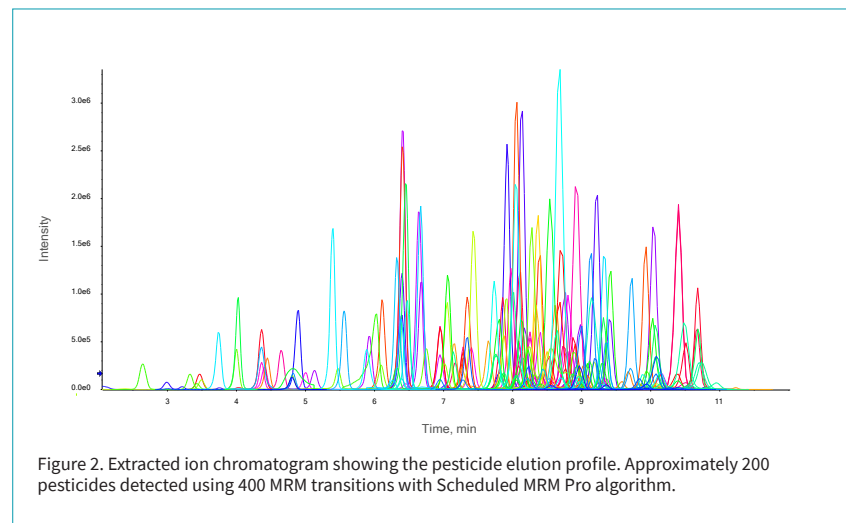
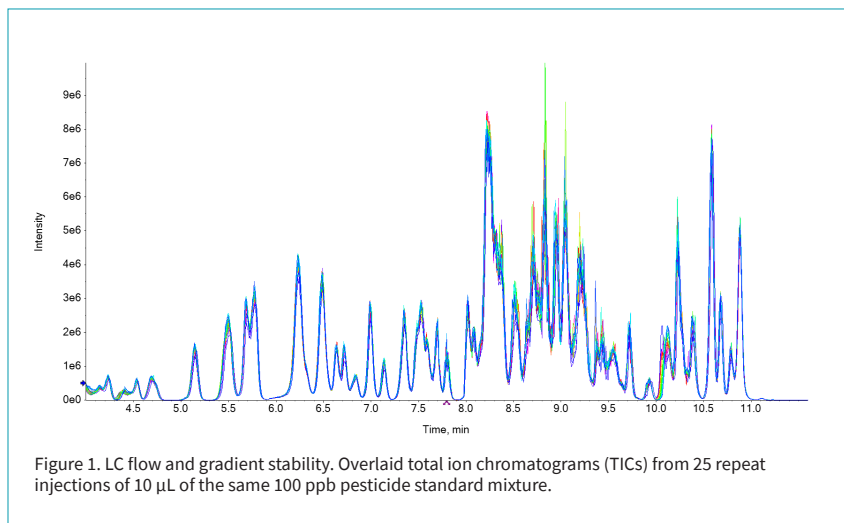
## ExionLC 2.0 injector precision

5 replicate injections of a diagnostic mixture at different injection volumes (0.5 to 25  $\mu\text{L}$ ). Calculated reproducibility %CVs was <1% for all injection volumes. All injections were performed using  $\mu\text{L}$  pick-up plus injection mode in order to optimize sample consumption with 100  $\mu\text{L}$  sample loop.



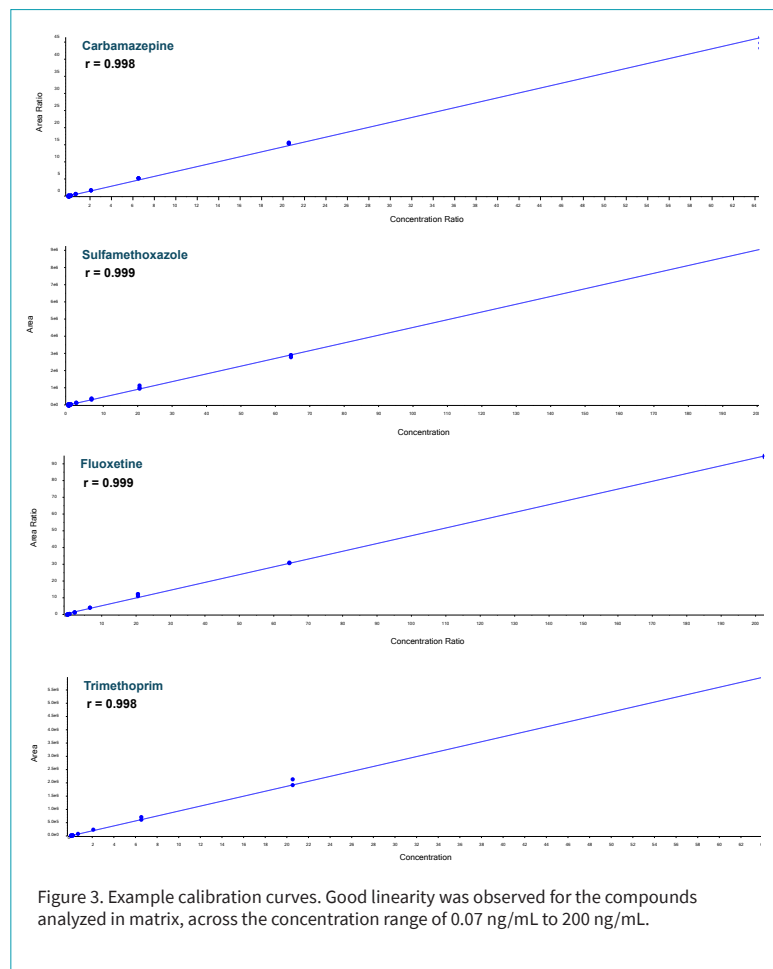
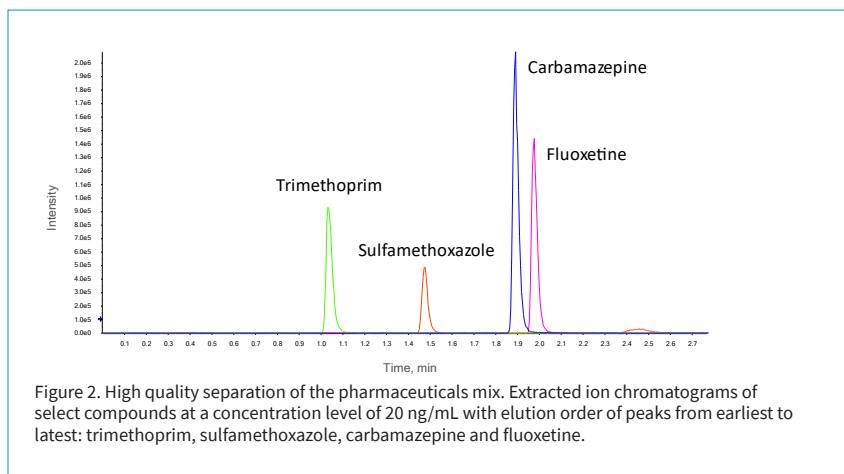
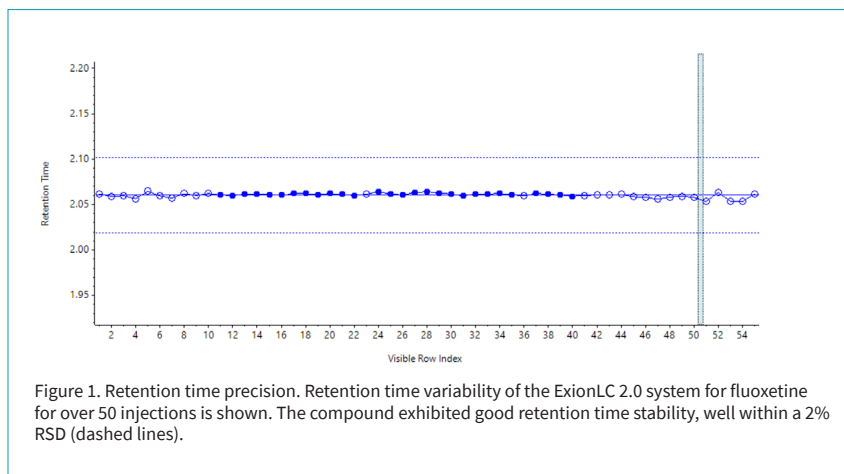
# Large panel MRM assays for pesticides testing

With hundreds of samples to screen within tight deadlines and strict regulations, accurate pesticide residue analysis is critical in today's landscape. The ExionLC 2.0 system provides a solid solution to detect and identify pesticide compounds across multiple classes. Utilizing excellent flow rate precision and retention time stability, the system enables simultaneous identification and quantification of a large panel of pesticides using the Scheduled MRM algorithm without compromising in data quality.



# High-quality bioanalysis of small molecule pharmaceuticals

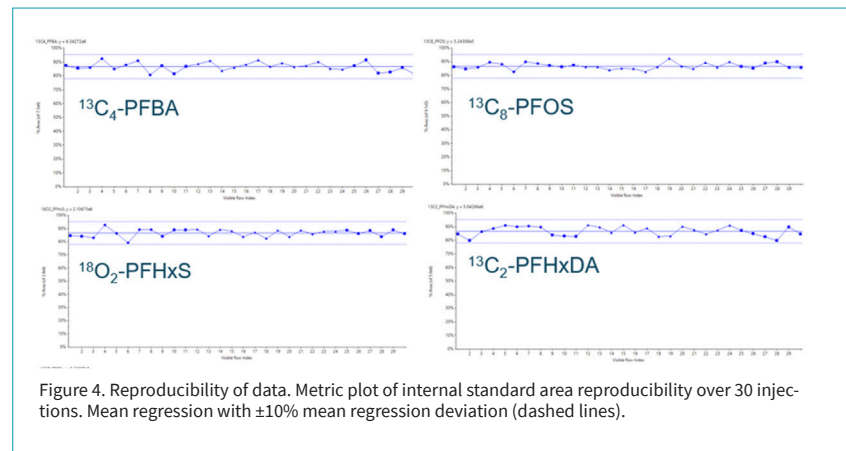
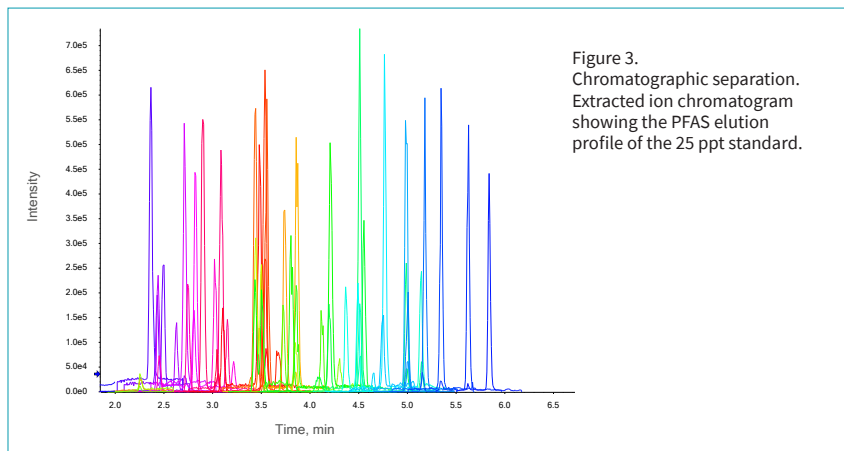
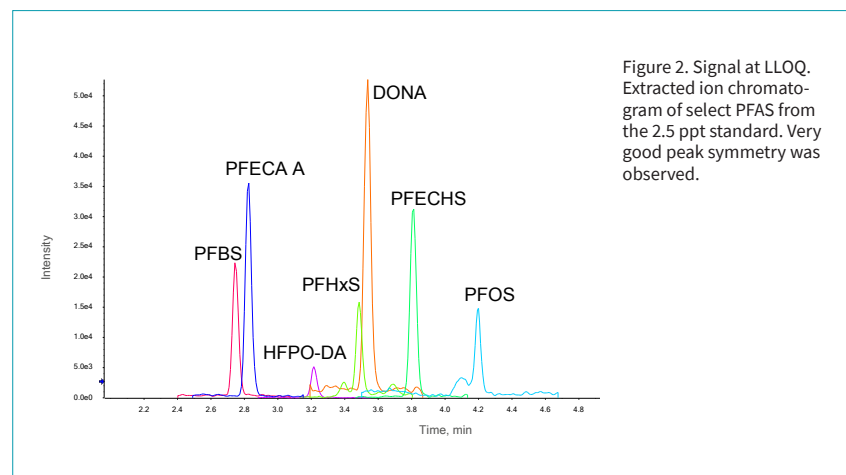
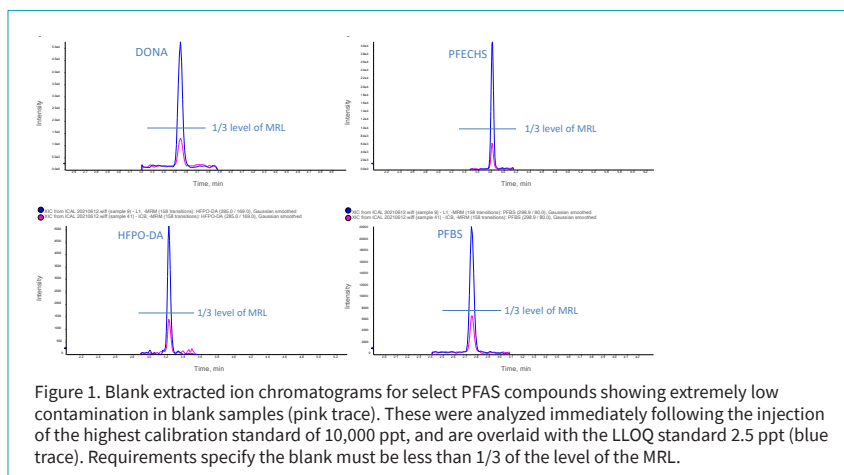
Small molecule therapeutics demand accurate quantitative bioanalysis at every stage of the drug pipeline. From lead discovery to market authorization, confident decisions need reliable bioanalytical results. Because of the potency of modern drugs, high sensitivity is crucial. The ExionLC 2.0 system is engineered to provide robust, sensitive performance for high-throughput bioanalysis workflows. With precise and stable solvent flow delivering less than 1% retention time variation, and the accuracy and precision to achieve excellent quantification results (linear coefficient of determination performance  $r^2 > 0.99$  and precision  $< 15\%$  coefficient of variation for concentrations), the system delivers data you can rely on.





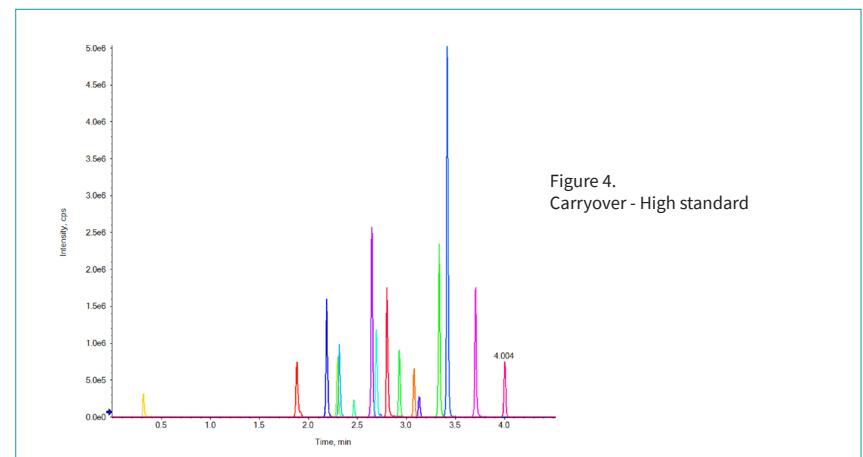
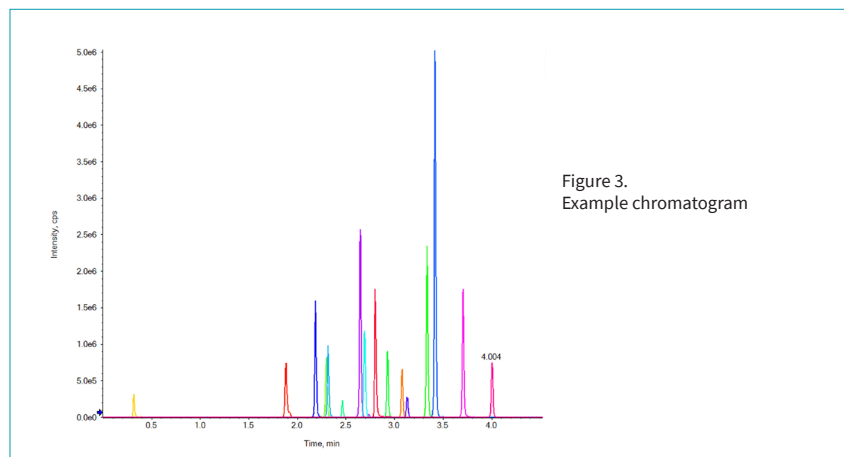
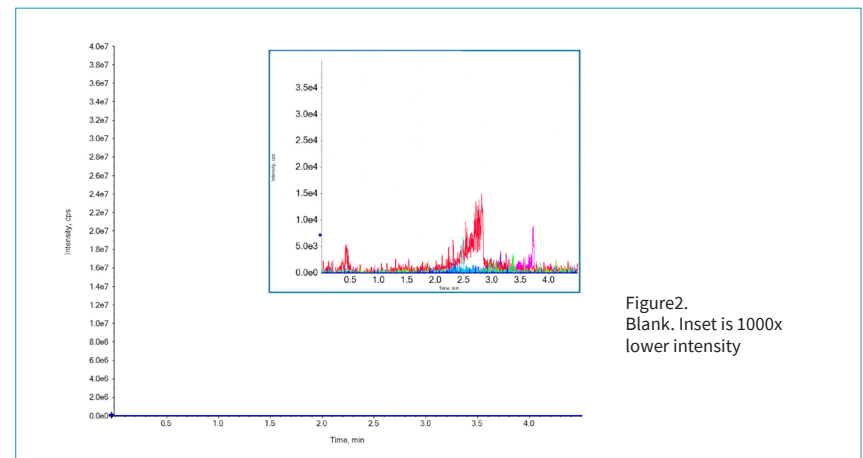
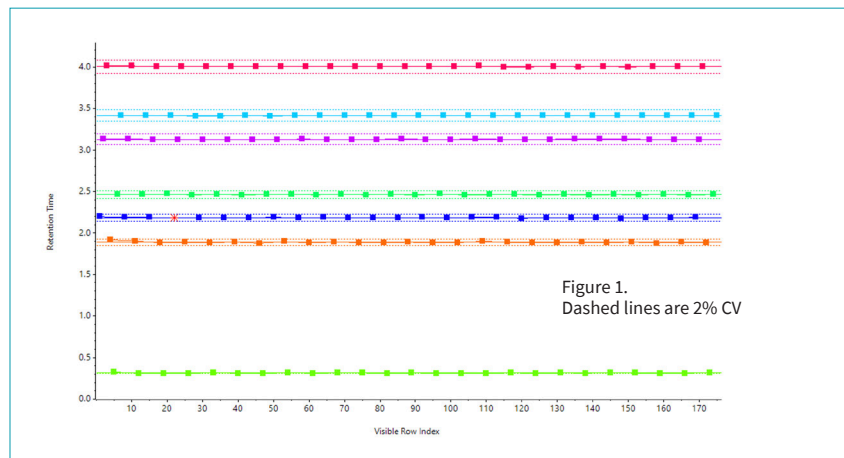
# Significantly reducing the challenges of PFAS carryover

PFAS chemicals which are highly persistent, lingering and accumulating over time in humans, animals and the environment, are sometimes referred to as “forever chemicals”. The demand to test these compounds is significantly growing. One of the main challenges laboratories face is the impact of carryover on analysis. The optional wash system provides flexibility in wash solvent selection and flow rate options for extended needle wash capabilities to minimize carryover, which reduces false positive rates and the need for repeat extractions and re-injections. The ability to customize the system and optimize the cleanup of all autosampler solvents reduces system contamination to a minimum, allowing accurate determination of PFAS even at low levels.



# Reproducible results for large scale peptide quantification

Accurate quantification is needed to confirm or refute protein biomarker utility for large scale validation studies. Higher throughput can mean reduced sample preparation and accelerated chromatography, both of which can increase the chance of interference. Peptides also present a unique challenge as analytes with varying stability, adsorption, solubility, and carryover performance. The ExionLC 2.0 system delivers precise and stable solvent flow delivering less than 2% RSD retention time variation. Run large cohort studies confidently with the accuracy and precision to get reproducible data sets.



# Why choose an ExionLC 2.0 system?



SCIEX ZenoTOF 7600 system with the ExionLC 2.0 system



SCIEX 7500 system with the ExionLC 2.0 system

## Advanced performance

- Linearity
- Injection precision
- Retention time stability
- Carryover

## Single vendor

- Whole solution support
- Eliminates cross-vendor troubleshooting
- Service and support excellence
- Software version upgrades

## Standard features

- Solvent selection valve
- Fully integrated degasser
- Column oven included as part of the system

## Ease of use

- Real-time pump pressure trace
- Autosampler is simple to use and maintain
- Phenomenex SecurityLink finger-tight high-pressure fittings

## Mass spectrometer compatibility

Triple Quad 3500, 4500, 5500+, 6500+ and 7500 systems, QTRAP 4500, 5500+, 6500+ and 7500 systems, QTOF X500R, X500B and ZenoTOF 7600 system.



# SCIEX Now support network

## LC expertise

With over 50 years experience supporting multi-vendor LCs our SCIEX customer support network has a wealth of expertise and troubleshooting experience. Our network of specialists have a depth of knowledge across our whole portfolio, and our end-to-end solutions.

ExionLC 2.0 systems offer many benefits to your lab:

- Simple to use and maintain
- Straight forward LC operation
- Seamless software integration
- Supported by Danaher supply chain
- Product lifecycle support
- Upgrade options as your lab expands
- Maximize return on your investment

## SCIEX Now

- Manage your instruments.
- Submit and manage support cases, track status and history
- Access online training courses and articles
- Manage software licenses linked to your registered instruments
- View and report critical instrument statistics when connected to StatusScope remote monitoring service
- Be a part of the SCIEX community by submitting questions and comments
- Receive notifications from SCIEX with content based on your preferences
- Built on a legacy of high performance
- SCIEX Now Learning Hub Success programs provide LC-MS and CE training customized to meet your exact needs

→ [FIND OUT MORE](#)

The SCIEX clinical diagnostic portfolio is For In Vitro Diagnostic Use. Rx Only. Product(s) not available in all countries. For information on availability, please contact your local sales representative or refer to <https://sciex.com/diagnostics>. All other products are For Research Use Only. Not for use in Diagnostic Procedures. Trademarks and/or registered trademarks mentioned herein, including associated logos, are the property of AB Sciex Pte. Ltd. or their respective owners in the United States and/or certain other countries (see [sciex.com/trademarks](https://sciex.com/trademarks)). © 2021 DH Tech. Dev. Pte. Ltd. RUO-MKT-03-13804-A

**Headquarters**  
500 Old Connecticut Path  
Framingham, MA 01701 USA  
Phone 508-383-7700  
[sciex.com](https://sciex.com)

**International Sales**  
For our office locations please  
call the division headquarters  
or refer to our website at  
[sciex.com/offices](https://sciex.com/offices)



The Power of Precision