Simplify. Clarify. Quantify

See how SelexION® Differential Mobility Technology addresses your biggest analytical challenges

SelexION technology delivers a sample separation that is orthogonal to mass separation for your most challenging samples. Instead of returning to method development, SelexION DMS technology allows you to reduce noise and interference from your sample so you can measure the molecules that count.

Learn how you can overcome these 5 common challenges by incorporating SelexION DMS separation on your SCIEX Triple Quad™, QTRAP®, or TripleTOF® System
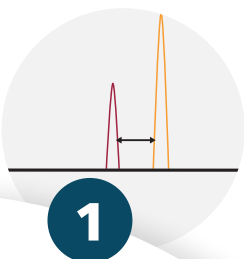
Detection Challenges due to Matrix Interferences?

DMS technology can increase your confidence in quantitative analysis free from matrix interferences

Separate analyte ions from overlapping matrix interferences within complex samples, allowing for more selective detection of your compound of interest and worry free quantitation

1
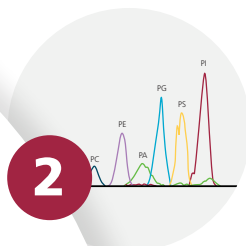
Inability to Confidently Separate Isobaric and Isomeric Species?

DMS technology can expand your ability to identify isobaric species with confidence

Address isobaric interferences by separating your sample prior to MS analysis to improve identification, such as separating phospholipid samples into sub-classes for accurate lipid class quantitation, or identifying differentially localized modifications on the same peptide sequence.

2
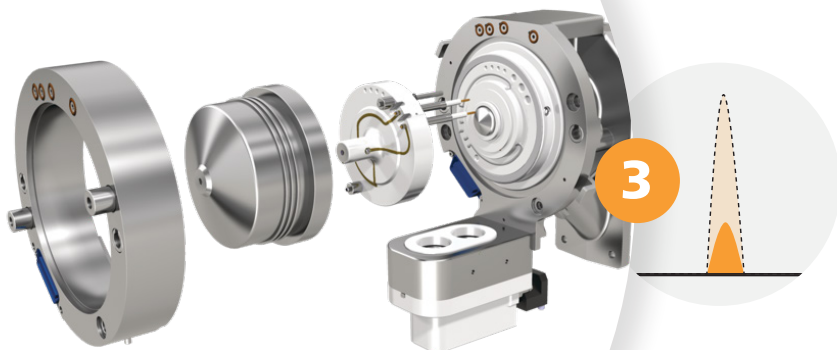
Quantitation Limits Hindered by High Background Noise?

DMS technology can reduce overall background noise to enhance lower limits of detection

Reduce or remove background noise signal using the separation power of DMS, allowing your compound of interest to be detected at lower levels than previously possible.

3

Lengthy Sample Preparation Procedures?

DMS technology can save you time and energy during sample preparation

If you're required to perform lengthy and complex sample preparation procedures and HPLC conditions to separate your analyte of interest from interfering sample matrix components, simplify your prep procedures and rely on DMS orthogonal separation to reduce background and isolate your compound of interest prior to MS detection

4

Looking to Increase Assay Diversity without Decreasing Throughput?

DMS technology can enable assay diversity without impacting instrument downtime

Unlike other differential ion mobility approaches, the SelexION DMS device is not permanent. It takes less than 2 minutes to install without breaking vacuum on your system. This means you can use SelexION for your challenging assays, and remove it when it's not required with minimal impact to your instrument uptime.

5

SelexION mobility provides a new dimension in selectivity.

Lipidomics

The biggest benefits:

Resolve multiple lipid classes within complex lipid matrices prior to MS analysis to enable more confident identification of lipid species and more accurate quantitation by MS/MS.

Food and Environmental Testing

The biggest benefits:

Compounds required to be analyzed by regulatory agencies may be difficult to reproducibly detect due to complex matrices. You'll have an additional level of separation to reduce background noise and interferences to enable robust and reproducible detection of food and environmental contaminants.

Peptide and Protein Quantitation

The biggest benefits:

Enhance the analysis of peptides and proteins in complex matrices that suffer from interferences, poor fragmentation, or lack of quality unique peptides compared to background. This results in more sensitive and selective detection of large molecule targets

Forensics

The biggest benefits:

Forensic analytes can be difficult to accurately detect because of the complexity of matrices typically provided. SelexION technology can reduce chemical noise and improve quantitative accuracy to rapidly deliver the data you need.

Small Molecule Bioanalysis and Metabolism

The biggest benefits:

Get an orthogonal level of separation to reduce background noise, decrease interferences, and separate similar compounds to enable robust and reproducible bioanalytical methods without having to resort to complex HPLC conditions or sample work up procedures.

SelexION Differential Mobility Separations
Get to a new level of selectivity

SCIEX