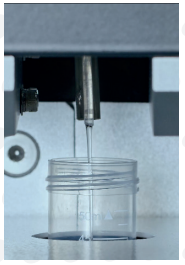
DRQ

Automated QuEChERS Handling Platform

As health focus grows, test samples diversify and processing complexity escalates. Manual preparation, exemplified by the QuEChERS method for pesticide residues, is cumbersome, affecting recovery and reproducibility. Additionally, toxic and permeable reagents pose health risks to lab personnel. The DRQ Automated QuEChERS Processing Platform offers an efficient solution that optimizes workflows, enhances precision, and minimizes human error. Crucially, DRQ also reduces lab personnel's exposure to hazardous reagents, directly addressing these challenges.

DRQ Automated QuEChERS Processing Platform

60-Position Sample Rack
Meets Routine Experimental Needs

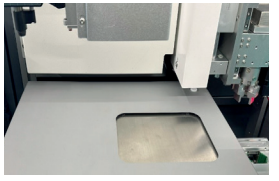


High-Precision Liquid Dispensing
6 Solvent Channels: Easily Switch Methods，Streamlined Operation

Disposable Pipette Tips
Ensures clean vessels for each transfer, they preventing cross-contamination, guaranteeing accurate experimental results

Oscillation Module
High-efficiency oscillation significantly boosts extraction and adapts to diverse sample types. Coupled with an independent Homogenizer Adding module, it ensures stable homogenization of complex samples, reducing manual steps and optimizing workflows

Refrigerated Centrifuge
With speeds up to 5500 rpm, it smoothly manages most routine lab scenarios. For heat-sensitive samples, activating the refrigeration function substantially reduces target substance degradation, delivering precise and reliable results



Sample Cooling Module
For extraction salt formulas with significant exothermic reactions upon hydration, the optional Sample Cooling Module precisely manages localized heating, maintaining result accuracy

Application Fields

Food Industry

Pharmaceutical Industry

Example of Applied Standards

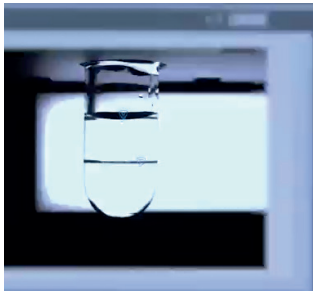
- Determination of 208 Types of Pesticides and Their Metabolites in Plant-based Foods by Gas Chromatography-Mass Spectrometry
- Determination of 331 Types of Pesticides and Their Metabolites in Plant-based Foods by Liquid Chromatography-Mass Spectrometry
- Determination of Multiple Prohibited Pesticide Residues in Crude Drugs and Sliced Herbal Drugs (Plant Origin) by Method V in General Chapter 2341 of Chinese Pharmacopoeia (2020 Edition), Part IV
- AOAC.2007.01 Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate
- EN 15662 Foods of plant origin - Multimethod for the determination of pesticide residues using GC- and LC-based analysis following acetonitrile extraction/partitioning and clean-up by dispersive SPE - Modular QuEChERS-method

The final step in sample preparation before chromatographic analysis typically involves concentration and filtration. Traditional manual nitrogen blowing methods are time-consuming and labor-intensive, requiring constant monitoring to prevent missing the endpoint. Our DRQ-B Automated Concentration and Filtration Platform integrates the entire workflow of concentration, internal standard addition, volume adjustment, and filtration into a single automated process. This significantly boosts efficiency and minimizes human error. Whether for pesticide residue detection or veterinary drug residue analysis, the DRQ-B comprehensively automates these critical steps, ensuring precise and efficient sample preparation for a wide range of applications.

DRQ-B Automated Concentration and Filtration Platform

AI Vision System

Features an autonomous learning AI vision system that automatically determines the concentration endpoint, enabling near-dry judgment and precise volume adjustment for samples



SagaCity OS Software Platform

- Autonomous decision-making software platform
- Supports customer-defined experimental workflows
- Autonomously schedules based on customer workflows, boosting task execution efficiency
- Drag-and-drop workflow interface: focuses purely on experimental parameters
- Features three-level user permission management
- Supports multi-method runs within a single sequence

The combination of DRQ and DRQ-B offers an ideal solution for fully automating the QuEChERS sample pretreatment workflow. This system automates the entire process, from sample extraction to concentration, volume adjustment, and filtration directly into a chromatography vial.

DRQ & DRQ-B:

Precisely Leading Fully Automated QuEChERS Sample Preparation

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