

DRQ



## Automated QuEChERS Handling Platform

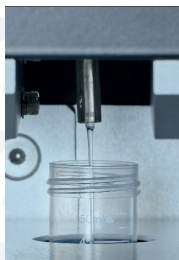


As health focus grows, test samples diversify and processing complexity escalates. Manual preparation, exemplified by the QuEChERS method for pesticide residues, is cumbersome, affecting recovery and reproducibility. Additionally, toxic and permeable reagents pose health risks to lab personnel. The DRQ 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, preventing cross-contamination, guaranteeing accurate experimental results

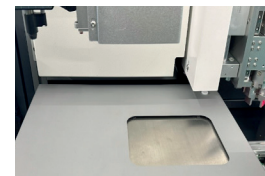


### Oscillation Module

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

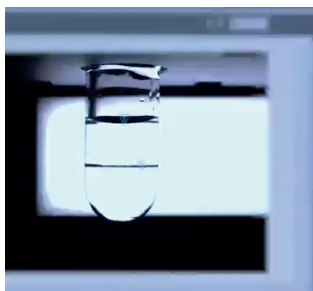
- Determination of 208 Types of Pesticides and Their Metabolites in Plant-based Foods by Gas Chromatography-Mass Spectrometry
- Determination of 331 Types of Pesticides and Their Metabolites in Plant-based Foods by Liquid Chromatography-Mass Spectrometry
- Determination of Multiple Prohibited Pesticide 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

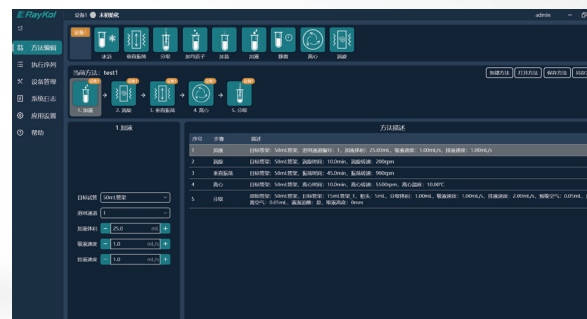
### AI Vision System

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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