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# Glyphosate Detection Kit

Tech ID: 33560 / UC Case 2024-976-0

## BRIEF DESCRIPTION

An innovative solution for the precise detection of glyphosate, glufosinate, and AMPA in water samples.

## SUGGESTED USES

- Environmental monitoring and water safety testing.
- Quality control in water treatment facilities.
- Research and development in environmental science.
- Home and professional use for water contaminant detection.

## FEATURES/BENEFITS

- High precision and efficiency in detecting glyphosate.
- User-friendly interface for both in-home and laboratory use.
- Innovative pre-treatment mechanism for robust sample analysis.
- Advanced LC-MS/MS technology for lower detection limits.
- Designed to minimize peak tailing and enhance retention times.

## TECHNOLOGY DESCRIPTION

This user-friendly test kit enhances the detection of glyphosate-based herbicides in water through advanced analytical techniques. Utilizing pre-column derivatization coupled with liquid chromatography-mass spectrometry (LC-MS/MS), the kit simplifies the derivatization and pretreatment process for on-site sample preservation. Its design aims to make glyphosate detection more accessible and accurate even at trace levels, ensuring environmental monitoring and water safety measures can be efficiently implemented.

## STATE OF DEVELOPMENT

Kits have been designed and lab protocols have been established.

## PATENT STATUS

Patent Pending

## RELATED MATERIALS

## CONTACT

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## INVENTORS

» Hobbs, Shakira

## OTHER INFORMATION

## CATEGORIZED AS

- » **Sensors & Instrumentation**
- » Environmental Sensors

## RELATED CASES

2024-976-0

» "Improved Detection of Glyphosate, Aminomethylphosphonic Acid, and Glufosinate Via Solid Phase Extraction and Liquid Chromatography with Tandem Mass Spectrometry." Martin, Pedro J.; Pham, Kendrick; Olivares, Christopher I.; and Hobbs, Shakira. - 12/19/2023

» Martin, Pedro J., et al. "Advanced Liquid Chromatography with Tandem Mass Spectrometry Method for Quantifying Glyphosate, Glufosinate, and Aminomethylphosphonic Acid Using Pre-Column Derivatization." ACS Es&t Water 3.8 (2023): 2407-2414. - 05/24/2023

OTHER INFORMATION

Provisional patent filed

