

Glyphosate in Human Urine Sample Dilution

1. Intended Use

For the detection of Glyphosate in human urine.

2. Range of Detection

The range of detection is 7.5 ppb to 400 ppb in matrix. If samples exceed calibration, are known to contain higher analyte levels, or a higher detection range is necessary, samples should be diluted further prior to analysis.

3. Materials Required (not provided)

Vortex mixer

Timer

Centrifuge or microcentrifuge

15 mL centrifuge tubes or 2 mL microcentrifuge tubes

4 mL glass vials with Teflon-lined caps

Vortex mixer

Micropipettes with disposable plastic tips

ABRAXIS® Glyphosate Sample Diluent (PN 500082)

ABRAXIS® Glyphosate Plate ELISA Kit (PN 500205)

4. Notes and Precautions

This procedure is intended for human urine samples. Other matrices should be thoroughly validated before use with this procedure.

- Urine samples that have been previously stored may contain a visible precipitate. Samples containing this precipitate must be centrifuged at 3,000 x g for 5 minutes prior to dilution (Section 5). The upper, liquid layer should then be transferred to a new sample vial and the lower layer can be discarded.
- Before dispensing any volume of liquid, condition each pipette tip by drawing the liquid in and out of the tip 3 times before the final dispense. This will ensure that an accurate volume is transferred.

5. Dilution Procedure

5.1 Add 3.96 mL of ABRAXIS® Glyphosate Sample Diluent into an appropriately labeled 4 mL glass vial with a Teflon-lined cap.

5.2 Add 40 µL of urine sample into the ABRAXIS® Glyphosate Sample Diluent in the 4 mL glass vial (1:100 dilution). Vortex thoroughly.

5.3 The diluted urine sample will then be analyzed as sample, see *Derivatization of Standards, Control and Samples* in the Test Preparation section of the ABRAXIS® Glyphosate Plate ELISA Kit user's guide.

6. Evaluation of Results

The ELISA results must be multiplied by a factor of 100 to account for the necessary dilution. Samples showing a concentration lower than Standard 1 (0.075 ppb) should be reported as < 7.5 ppb of Glyphosate. Samples showing a higher concentration than Standard 5 (4.0 ppb) can be reported as > 400 ppb or diluted further and re-analyzed to obtain an accurate quantitative result.

7. For ordering or technical assistance contact:

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