

# 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 ahigher 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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