

Abused Drugs In Canine Or Equine Urine Using: 500 mg XTRACKT® Extraction Column



UCT Part Numbers

XRDAH515
XtrackT DAU
500 mg 15 mL

Procedure:

1a. Prepare Sample-Enzymatic Hydrolysis of Glucuronides

- To 5 mL of urine add internal standard(s) and 2 mL of β -Glucuronidase 5,000 F units/mL *Patella vulgata* in 100 mM Acetate Buffer (pH 5.0).
- Mix/vortex. Hydrolyze at 65 °C for 3 hours.
- Centrifuge for 10 min. at 2000 rpm, discard pellet.

1b. Base Hydrolysis of Glucuronides

- To 2 mL of urine add internal standard(s) and 100 μ L of 10 N NaOH.
- Mix/vortex. Hydrolyze at 60 °C for 20 minutes.
- Centrifuge for 10 min. at 2000 rpm, discard pellet.

1c. Combine Hydrolysates

- Combine both hydrolysis products with 5 mL of 100 mM phosphate buffer (pH 6.0).
- Adjust sample pH = 6.0 ± 0.5 with 0.5 M Phosphoric acid.

2. Condition XtrackT® Extraction Column

- 1 x 5 mL CH_3OH .
- 1 x 5 mL D.I. H_2O .
- 1 x 3 mL 100 mM phosphate buffer (pH 6.0).

Note: Aspirate at < 3 inches Hg to prevent sorbent drying.

3. Apply Sample

- Load at 1 to 2 mL / minute.

4. Wash Column

- 1 x 3 mL 100 mM phosphate buffer (pH 6.0).
- 1 x 2 mL 1.0 M acetic acid.
- Dry column (5 minutes at > 10 inches Hg).
- 1 x 2 mL hexane.

5. Elute Acidic and Neutral Drugs

- 1 x 4 mL methylene chloride; collect eluate at < 5 mL / minute.

6. Elute Steroids

- 2 x 4 mL ethyl acetate; collect eluate at < 5 mL / minute.

7. Wash Column

- 1 x 5 mL CH_3OH ; aspirate.

8. Elute Basic Drugs

- 1 x 5 mL methylene chloride / isopropanol / ammonium hydroxide (78:20:2).

9. Dry Eluate

- Evaporate to dryness at < 40 °C.
- Reconstitute with 100 μ L ethyl acetate.

10. Quantitate

- Spot onto TLC plate or inject 1 to 2 μ L onto chromatograph



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