# Basic Drugs For HPLC Analysis Using: 200 mg Clean Screen<sup>®</sup> Extraction Column



### **Procedure:**

#### 1. Prepare Sample

- a) To 1 m of 100 mM phosphate buffer (pH= 6.0) add internal standards\*. Mix/vortex. Add 1-5 mL of urine or 1 mL of blood, plasma/serum or 1g (1: 4) tissue homogenate.
- b) Mix/vortex.
- c) Add 2 mL of 100 mM phosphate buffer (pH 6.0)
- d) Sample pH should be  $6.0 \pm 0.5$ .
- e) Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.
- f) Centrifuge as appropriate.

#### 2. Condition Clean Screen® Extraction Column

- a) 1 x 3 mL CH<sub>3</sub>OH.
- b) 1 x 3 mL D.I. H<sub>2</sub>O.
- c) 1 x 1 mL 100 mM phosphate buffer (pH= 6.0).
- Note: Aspirate at < 3 inches Hg to prevent sorbent drying.

#### 3. Apply Sample

a) Load at 1 to 2 mL/minute.

#### 4. Wash Column

- a) 1 x 3 mL D.I. H<sub>2</sub>O.
- b) 1 x 1 mL 100 mM acetic acid.
- c) 1 x 3 mL Methanol.
- d) Dry column (5 minutes at > 10 inches Hg).

#### 5. Elute Bases

- a) 1 x 2 mL CH₃OH/NH₄OH (98:2)
- b) Collect eluate at 1 to 2 mL/minute.
- Note: Prepare elution solvent daily

## UCT Part Numbers

Or

**ZSDAU020** Clean Screen® DAU 10 mL, 200 mg sorbent Without Tips ZCDAU020

Clean Screen® DAU 10 mL, 200 mg sorbent With CLEAN-THRU® Tips

#### 6. Extract

- a) To eluate add 2.0 mL D.I. H2O and 500 µL methylene chloride.
- b) Mix/vortex.
- c) Centrifuge at 2,000 RPM for 10 minutes.
- d) Transfer organic lower layer to a clean test tube.

#### 7. Evaporate

a) Evaporate to dryness at < 40 °C.

#### 8. Quantitate

a) Reconstitute in mobile phase and inject onto the HPLC



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