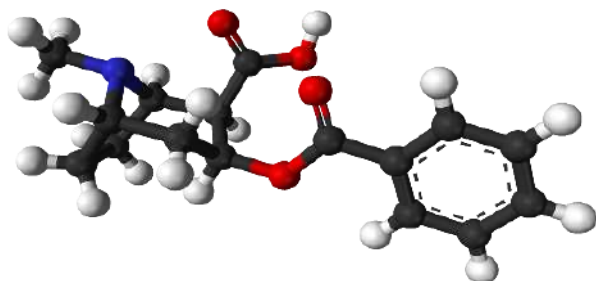


# Cocaine and Benzoylecgonine In Serum, Plasma, Or Whole Blood For HPLC Using: 200 mg Clean Screen® DAU Extraction Column



## UCT Part Numbers

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

Or

**ZCDAU020**  
Clean Screen® DAU  
10 mL, 200 mg sorbent  
With CLEAN-THRU® Tips

## Procedure:

### 1. Prepare Sample

- To 4 mL of D.I. H<sub>2</sub>O add internal standards. 1 mL of sample (serum, plasma or whole blood) add internal standard(s). Mix/vortex and let stand 5 minutes.
- Centrifuge for 10 minutes at 2000 rpm and discard pellet.
- Add 2 mL of 100 mM phosphate buffer (pH = 6.0).
- Mix/vortex.
- Sample pH should be 6.0 ± 0.5.
- Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.

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

- 1 x 3 mL CH<sub>3</sub>OH.
  - 1 x 3 mL D.I. H<sub>2</sub>O.
  - 1 x 1 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 D.I. H<sub>2</sub>O.
- 1 x 2 mL 100 mM HCl.
- 1 x 3 mL CH<sub>3</sub>OH.
- Dry column (5 minutes at > 10 inches Hg).

### 5A\*. Elute Cocaine and Benzoylecgonine

- 1 x 3 mL CH<sub>2</sub>Cl<sub>2</sub>/IPA/NH<sub>4</sub>OH (78:20:2); Collect eluate at 1 to 2 mL/minute.
- Note:** Prepare elution solvent daily. Add IPA/NH<sub>4</sub>OH, mix, then add CH<sub>2</sub>Cl<sub>2</sub> (pH 11-12).

### 5B\*. Elute Cocaine and Benzoylecgonine

- 1 x 2 mL CH<sub>3</sub>OH/NH<sub>4</sub>OH (98:2); collect eluate at 1 to 2 mL/minute.
- Note:** Prepare elution solvent daily.
- Add 3 mL D.I. H<sub>2</sub>O and 500 µL CH<sub>2</sub>Cl<sub>2</sub> to eluate.
  - Mix / vortex 10 seconds. Centrifuge if necessary to separate layers.
  - Aspirate and discard aqueous (upper) layer.

### 6. Concentrate

- Evaporate to dryness at < 40°C.
  - Reconstitute in mobile phase for injection into HPLC.
- Note:** \*Choose either 5A or 5B



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