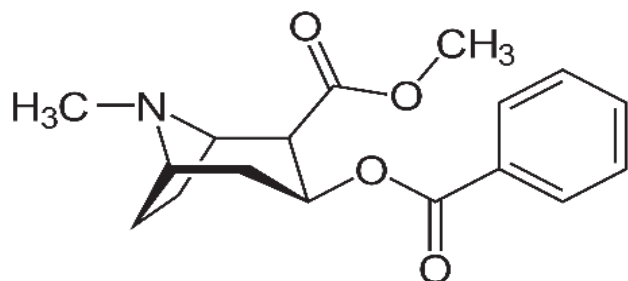


# Cocaine, Benzoylecgonine, and Cocaethylene In Blood, Plasma/Serum, Urine and Tissue Using: 200 mg Clean Screen® Extraction Column



## UCT Part Numbers

### ZSTHC020

Clean Screen® THC Extraction  
Column 200 mg 10 mL

## Procedure:

### 1. Prepare Sample

- To 1 mL of 100 mM phosphate buffer (pH 6) add internal standard.\*
- Add 1 mL of whole blood, serum/ plasma, urine, or 1g tissue homogenate (1:4). Add 2 mL of 100 mM phosphate buffer (pH 6).
- Vortex and centrifuge as appropriate.

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

### 5. Elute Cocaine, Benzoylecgonine, Cocaethylene

- 1 x 3 mL ethyl acetate; acetonitrile: ammonia (78:20:2 v/v)
- Or
- 1 x 3 mL CH<sub>2</sub>Cl<sub>2</sub>/ IPA/ ammonia (78:20:2 v/v)
  - Collect eluate at 1-2 mL /minute.

### 6. Evaporation

- Evaporate eluates to dryness under a gentle stream of nitrogen.

### 7. Reconstitute

- Sample in 50 µL of CH<sub>3</sub>OH.
- Inject 5 µL.

## Instrument Conditions

|                    |                                                  |
|--------------------|--------------------------------------------------|
| Column             | 50 x 2.1 mm (3 µm) Selectra® Phenyl (UCT, Inc.,) |
| Flowrate           | 0.35 mL/ minute                                  |
| Column Temperature | ambient                                          |
| Detector           | API 2000 MS/MS                                   |

## Mobile Phase

| Time | % Acetonitrile | %0.1% Formic acid |
|------|----------------|-------------------|
| 0    | 33             | 67                |
| 5    | 33             | 67                |

| Compound            | MRM Transition | Cerilliant # |
|---------------------|----------------|--------------|
| Cocaine             | 304.2/ 182.3   | C-008        |
| *Cocaine-D3         | 307.2/ 185.2   | C-009        |
| Benzoylecgonine     | 290.1/168.0    | B-004        |
| *Benzoylecgonine-D8 | 298.2/171.3    | B-013        |
| Cocaethylene        | 318.2/ 196.2   | C-010        |
| *Cocaethylene-D8    | 326.2/204.2    | C-024        |

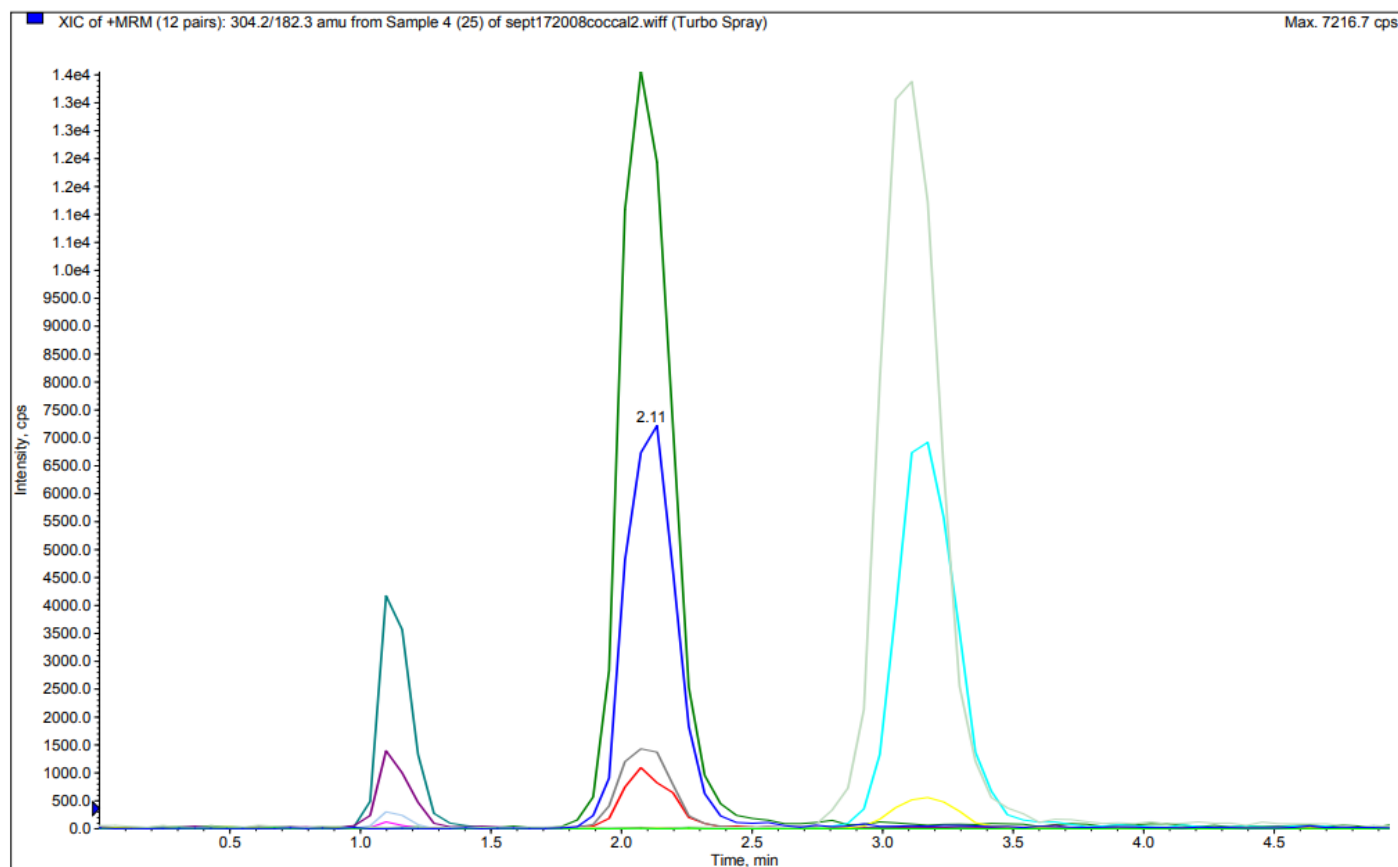


## Chromatogram Showing:

Cocaine/ Cocaine-D3

Benzoylecgonine/ Benzoylecgonine-D8

Cocaethylene/ Cocaethylene-D8

**Recovery:** > 90% (n=10)**LOD:** 10 ng/mL

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