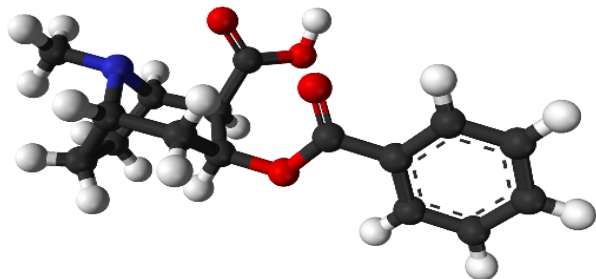


Cocaine and Benzoylecgonine In Blood, Plasma/Serum, Urine and Tissue For GC Or GC/MS Confirmations Using: 200 mg Clean Screen® DAU Extraction Column



UCT Part Numbers

ZSDAU020
Clean Screen® DAU
10 mL, 200 mg
without Tips

Or

ZCDAU020
Clean Screen® DAU
10 mL, 200 mg
with CLEAN-THRU® Tips

SBSTFA-1-1
BSTFA with 1% TMCS
1 g vial

Procedure:

1. Prepare Sample

- To 1 mL of 100 mM phosphate buffer (pH=6.0) add internal standards*. Add 2 mL of blood, plasma/ serum, urine or 1 g (1:4) tissue homogenate. Mix/vortex. Add 2 mL of 100 mM phosphate buffer (pH=6). Mix/vortex
- Sample pH should be 6.0 ± 0.5 .
- Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.
- Centrifuge as appropriate.

2. Condition Clean Screen® DAU Extraction Column

- 1 x 3 mL CH₃OH.
 - 1 x 3 mL D.I. H₂O.
 - 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. H₂O.
- 1 x 2 mL 100 mM HCl.
- 1 x 3 mL CH₃OH.
- Dry column (5 minutes at > 10 inches Hg).

5. Elute Cocaine and Benzoylecgonine

- 1 x 3 mL Methylene Chloride/Isopropanol/Ammonium Hydroxide (78:20:2).
 - Collect eluate at 1 to 2 mL/minute.
- Note:** Prepare elution solvent daily. Add IPA/NH₄OH, mix, then add CH₂Cl₂ (pH 11-12).

6. Dry Eluate

- Evaporate to dryness at < 40°C.

7. Derivatize

- Add 50 µL ethyl acetate and 50 µL BSTFA (with 1% TMCS).
 - Overlay with N₂ and cap. Mix/vortex.
 - React 20 minutes at 70°C.
 - Remove from heat source to cool.
- Note:** Do not evaporate BSTFA solution.

8. Quantitate

- Inject 1 to 2 µL onto gas chromatograph.
- For MSD monitor the following ions:



Cocaine and Benzoyllecgonine

Compound	Primary Ion**	Secondary	Tertiary	Cerilliant #
Cocaine-D3*	185	201	306	C-004
Cocaine	182	198	303	C-008
Benzoyllecgonine-D3-TMS*	243	259	364	B-008
Benzoyllecgonine-TMS	240	256	361	B-007

* Suggested internal standards for GC/MS: D₃-Cocaine, D₃-Benzoyllecgonine

** Quantitation Ion

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