Amphetamine In Oral Fluid Using An Oral Fluid Sampling Device



UCT Part Numbers

CSDAU206

Clean Screen® DAU 200 mg, 6 mL

Procedure:

1. Prepare Sample

Note: Employ oral fluid sampling device according to maker's instructions

- a) To 1 mL of 100 mM phosphate buffer (pH= 6) add internal standard.* Add 1 mL of oral fluid extract.
 Add 2 mL of 100 phosphate buffer (pH= 6). Mix/vortex.
- b) Sample pH should be 6.0 ± 0.5 .
- Adjust pH accordingly with 100 mM monobasic or dibasic sodium phosphate.
- d) Mix/vortex.
- e) Centrifuge as appropriate.

2. Condition Clean Screen® DAU Extraction Column

- a) 1 x 3 mL CH₃OH.
- b) $1 \times 3 \text{ mL DI H}_2\text{O}$.
- c) $1 \times 1 \text{ mL } 100 \text{ mM } \text{ phosphate buffer (pH= 6)}.$

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

3. Apply Sample

a) Load sample at 1 to 2 mL/minute

4. Wash Column

- a) $1 \times 3 \text{ mL DI H}_2\text{O}$
- b) 1 x 3 mL 100 mM Acetic Acid
- c) 1 x 3 mL CH₃OH
- d) Dry column (5 minutes at > 10 inches Hg)

5. Elute Amphetamine

- a) 1 x 3 mL CH₂Cl₂/IPA/NH₄OH (78:20:2)
- b) Collect eluate at 1-2 mL/minute.
- c) Add 100 µL of mobile phase and mix.

6. Evaporation

- a) Evaporate eluate under a gentle stream of nitrogen <40 °C
- b) Inject 10 μL





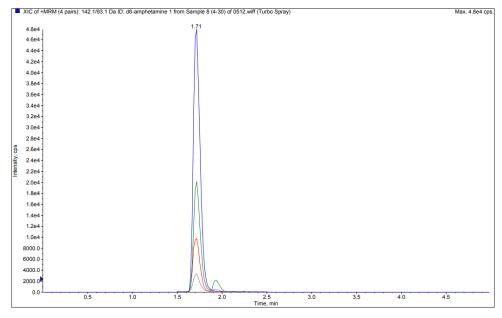


Instrument Conditions		
Column	C18 LC column 20 x 2.0 mm, 5 μm	
Column Temperature	40°C	
Flowrate	0.5 mL/minute	
Detector	API 3200 QTRAP MS/MS	

Mobile Phase			
Time (min)	% Acetonitrile	% 0.1 % Formic Acid	
0.5	5	95	
4.0	90	10	
4.15	5	95	
5.0	5	95	

Compound	MRM Transition
Amphetamine	136.1/91.0
*Amphetamine-d6	142.0/94.1

Chromatogram of Amphetamine Extracted From Oral Fluid Sampling Device



Recovery: > 95% (N=20)

LOD: 1 ng/mL







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