Bath Salts In Urine For LC-MS/MS Confirmations Using: 200 mg Clean Screen® Extraction Column



UCT Part Numbers

CSDAU206

CLEAN SCREEN® DAU 200 mg / 6 mL SPE Tube

Procedure:

1. Prepare Sample

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

2. Condition Clean Screen® Extraction Column

- a) 1 x 3 mL CH₃OH
- b) $1 \times 3 \text{ mL D.I. } H_2O$
- c) 1 x 1 mL 100 mM 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 Drugs

a) 1 x 3 mL CH_2CI_2 /IPA/NH₄OH (78: 20: 2 v/v) **Note:** Prepare elution solvent daily. Add IPA/NH₄OH, mix, then add CH_2CI_2

b) Collect eluate at 1-2 mL/minute.

6. Dry Eluates

- a) Evaporate eluate under a gentle stream of nitrogen < 40 °C. Dissolve residue in 100 μ L of mobile phase.
- b) Inject 5 μL







Instrument Conditions			
Column	100 x 2.1 mm (3μm) SELECTRA® Phenyl UCT, Inc.		
Column Temperature	40°C		
Flowrate	0.2 mL/ min		
Detector	API 4000Qtrap MS/MS		

Mobile Phase			
Time (min)	% Acetonitrile	% 0.1 % Formic Acid	
0	50	50	
5	50	50	

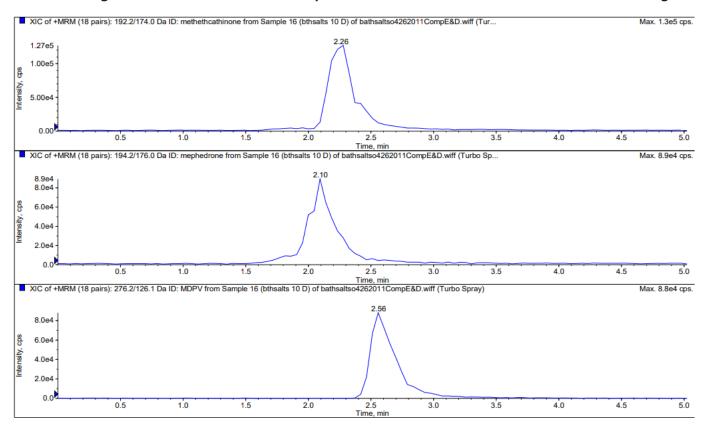
Compound	MRM Transition	Lipomed #
Butylone	222.1/174	BTL-128
Flephedrone	182.2/164	FMC-1291
MDPV	276.2/126	PYR-1340
Mephedrone	194.2/146	MMC-1252
*Mephedrone-D3	197.2/150	MMC-1271
Methedrone	192.2/124	MTH-1290
Methethcathinone	192.2/174	MEC-1299
Methylone	208.1/160	MTY-1289







Chromatogram of Methethcathinone, Mephedrone, and MDPV, extracted from urine at 10 ng/mL



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