



BETA AGONISTS IN URINE FOR GC/MS CONFIRMATIONS USING: 200 mg CLEAN SCREEN[®] EXTRACTION COLUMN

Part #: ZSDAU020 without Tips or ZCDAU020 with CLEAN-THRU[®] Tips

1. PREPARE SAMPLE:

To 1 mL of 100 mM Acetate Buffer (pH 4.5) add 1 mL of Urine. Add 2 mL of 100 mM Acetate Buffer (pH 4.5).

Mix/ vortex.

Centrifuge as appropriate.

2. CONDITION CLEAN SCREEN[®] EXTRACTION COLUMN

1 x 3 mL CH₃OH.

1 x 3 mL D.I. H₂O.

1 x 3 mL 100 mM Acetate Buffer (pH 4.7).

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

3. APPLY SAMPLE

Load at 1 to 2 mL/ minute.

4. WASH COLUMN

2 X 1 mL Acetone/ Methanol (1:1) aspirate.

Dry column (5 minutes at > 10 inches Hg).

5. ELUTE BETA AGONISTS

1 x 1 mL Dichloromethane/ Isopropanol and Ammonium Hydroxide (78:20:2).

Collect the eluate at 1-2 mL/ minute (or gravity).

NOTE: Prepare elution solvent fresh daily. Add IPA/NH₄OH, mix, then add CH₂Cl₂ (pH 11-12).

6. DRY ELUATE

Evaporate to dryness at < 40°C.

7. DERIVATIZE

Derivatization Solution: Methaneboronic acid at 5 mg/mL prepared in dry ethyl acetate (use molecular sieve).

Store this solution at -20°C (freezer conditions) until use.

Reaction Mixture:

Add 100 µL of the Methaneboronic acid solution (see above).

Mix/vortex.

React 15 minutes at 70°C. Remove from heat source to cool.

NOTE: Do not evaporate this solution.

8. ANALYSIS

Inject 1 to 2 µL sample (derivatized solution).