



SPEware uSPE (ultraSPE) Faster / Cleaner Sample Preparation

Amphetamines from Whole Blood

For GC or GC-MS confirmations using:
Trace-B 50mg.

1. PREPARE SAMPLE

To 0.5 ml of whole blood sample add 2 ml of 100 mM phosphate buffer (pH = 6.0) and IS. Mix/Vortex for 30 seconds. Sonicate sample for 15 minutes using an ultrasonic bath. Centrifuge for 15 minutes at 3000 rpm.

2. APPLY SAMPLE

Transfer the supernatant into the Trace-B column and flow through the column at flow rate of 2-5 ml/min

3. WASH COLUMN (All wash steps flow at 2-5 ml/min)

2 ml DI H₂O
1 ml 100 mM Acetic Acid
1 ml CH₃ OH
1ml Ethyl Acetate
Dry column (2 min at 25 psi N₂)

4. ELUTE AMPHETAMINES

2.0 ml Ethyl Acetate containing 2% NH₄OH; collect eluate at 1 to 2 ml/minute.
NOTE: use 12 x 75 mm test tubes if you use the manifold for evaporation.
NOTE: Prepare elution solvent daily.

5. DRY ELUATE

Evaporate to 50-100 ul at room temp.

6. DERIVATIZE

Add 20 ul HFAA allow mixture to stand at room temp for 20 minutes.
Evaporate to approximately 20-50 ul.
Add 1ml Hexane and 1ml 50% NH₄OH (1/1)
Vortex for 30 sec, Inject 1-3 ul of Hexane layer into GC/MS

7. QUANTITATE

Inject 1 to 3 ul sample onto chromatograph.