

Extraction of Amphetamines From Urine using Strata™ X-C

SPE method:*

Condition: 1mL methanol

Equilibrate: 1mL deionized H₂O

Load: 1mL urine (1:1 dilution w/ PBS) spiked with analyte and IS, acidified with 20µL H₃PO₄/mL

Wash 1: 1mL 5% methanol in 0.1N HCl

Wash 2: 1mL 100% methanol

Wash 3: 1mL 2.5% TEA/methanol

Elute: 1mL 5% NH₄OH/methanol

Blow down to almost dryness, reconstitute to 200µL with 20mM KH₂PO₄, pH 2.5;

Inject: 50µL on HPLC

*Note: the solvent volumes shown above are for 30mg bed mass. The solvent volumes will need to be adjusted for a smaller or larger bed mass.

HPLC Conditions:

Column: Luna 5µ C18(2), 150 x 4.6mm;

Mobile phase: A=20mM KH₂PO₄ (pH=2.50), B=ACN

Gradient: A/B=95/5 to 75/25 (Flow rate=1.5mL/min) in 7 min,

Detection: UV @ 214nm

% Recovery Strata-X-C

<i>Peaks</i>	<i>Analytes</i>	<i>Spike conc.</i>	<i>Strata-X-C</i>	<i>% RSD</i>
1	Ephedrin (IS)	0.8 µg/mL		
2	Amphetamine		94	2.86
3	Methamphetamine		101	1.62

Ordering Information

Order Number	Description
8B-S029-TAK	strata-X-C 30mg/1mL Tubes (100/Box)
8B-S029-UBJ	strata-X-C 60mg/3mL Tubes (50/Box)
8B-S029-ECH	strata-X-C 100mg/6mL Tubes (30/Box)
8B-S029-FCH	strata-X-C 200mg/6mL Tubes (30/Box)
8B-S029-HCH	strata-X-C 500mg/6mL Tubes (30/Box)
8E-S029-AGB	strata-X-C 96-Well Plate 10mg/well (2/Box)
8E-S029-TGB	strata-X-C 96-Well Plate 30mg/well (2/Box)

This method is designed as a convenient starting point for further investigation. This method can be tailored to meet your extraction goals. Phenomenex makes no guarantee regarding the accuracy or completeness of the method.

Chromatogram of Urine Extracts by strata™ X-C : A) Blank B) Spiked Sample

