



Revolutionary Technology

Performance is an important factor that plays a vital role in SPE method development because sorbent performance has a direct effect on analyte recovery, cleanliness of extracts, and sample preparation time. With the increasing challenges for faster and consistent extractions, the performance of conventional SPE technologies has led to the development of **Revolutionary SPE Technology** designed to meet all your SPE method development needs.

- strata[™]X Revolutionary Performance
 Surface modified polymer
- Waters Oasis® HLB*
 Hydrophilic and Lipophilic balance



If strata-X- SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, send in your comparative data within 45 days and keep the strata-X SPE product for FREE!

strata-X is trademark of Phenomenex, Inc. Oasis HLB is a registered trademark of Waters Corp. *As stated in 2003-2004 Waters Catalog page 18.



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Better Recovery

Better recovery results in simple and consistent SPE

strata-X has enhanced polar selectivity. The patent-pending surface modification of strata-X results in a surface that is more retentive for very polar compounds.

SPE Conditions

Sorbents: strata-X and Oasis HLB

30mg/1mL

Condition: 1mL methanol

Equilibrate: 1mL water

Load: 1 mL analyte (10.0µg/mL) spiked porcine plasma sample (diluted 1:2 with de-ionized water) following acidification with 2% phosphoric acid

Wash: 1mL 10% methanol in water, dry for 1 minute, Add 100uL methanol, let percolate for 20-30 seconds under

of methanol, in four successive cartridges in triplicate. Add 100µL of acetaminophen

Evaporate: under slow stream of N₂ and reconstitute

in mobile phase

HPLC Column: Luna[™] 5μ C8(2), 150 x 4.6 mm

Order No: 00F-4249-E0

Sample: 50µL of plasma extract Mobile Phase: A: 20mM KH₂PO₄ (pH 7.0)

B: methanol

Gradient: A/B (90:10) hold for 2 minutes to A/B (50:50) in 3 minutes hold for 2 minutes

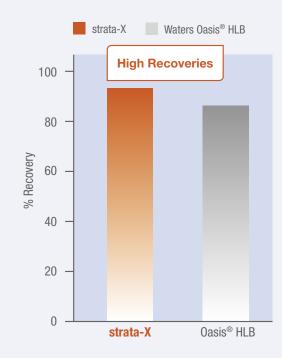
Flow rate: 1.0mL/min Temperature: 25°C Detector: UV @ 210nm

Int. Standard: Acetaminophen

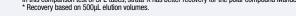
ABSOLUTE RECOVERY OF MANDELIC ACID*

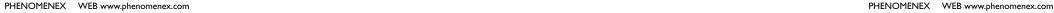
strata-X 92% Oasis HLB 86%

Recovery of Mandelic Acid Log P=0.85











Cleaner Extracts

Cleaner extracts result in better sensitivity for analytes

The strong multimode retention mechanisms of strata-X allow for aggressive washing with organic solvents without dramatically affecting recovery of analytes (see right). This is exceptionally useful for completely removing hydrophobic endogenous components from biological sample matrices such as urine or plasma.

SPE Conditions

Sorbents: strata-X and Oasis HLB

30mg/1mL

Condition: 1mL methanol
Equilibrate: 1mL water

Load: 1mL of spiked Atenolol

(40.0µg/mL) in water (pH 5.0)

Wash: 1mL volumes of 30, 40, and 50% methanol in de-ionized water (see graph), to collected fractions

add 100µL of Propranolol (100µg/mL) for HPLC analysis

HPLC Column: Luna[™] 5μ C8(2), 150 x 4.6 mm

Order No: 00F-4249-E0

Sample: 50µL extract from wash fraction

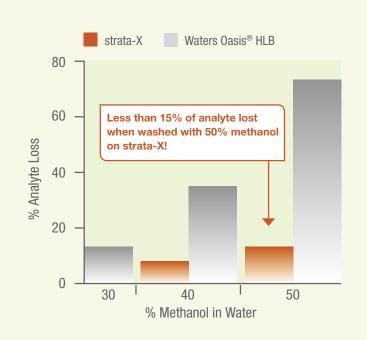
Mobile Phase: A: 20mM KH₂PO₄ (pH 7.0) B: acetonitrile

Gradient: A/B (90:10) to A/B (40:60) in 5 minutes hold for 6 minutes

Flow rate: 1.0mL/min
Temperature: 25°C

Detector: UV @ 214nm Int. Standard: Propranolol

Atenolol Wash Study Log P=0.16



In this comparison test of SPE tubes, strata-X has stronger retention for the polar compound Atenolol.

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strata[™]X provides **Revolutionary Performance**

SPE Conditions

Sorbents: strata-X and Oasis HLB

30mg/1mL

Condition: 1mL methanol Equilibrate: 1mL water

Load: 1mL of spiked Ranitidine (20.0µg/mL) in water (pH 5.0)

methanol in de-ionized water (see graph), to collected fractions add 100µL of Propranolol (100µg/mL) for HPLC analysis

HPLC Column: Luna[™] 5μ C8(2), 150 x 4.6 mm

Order No: 00F-4249-E0

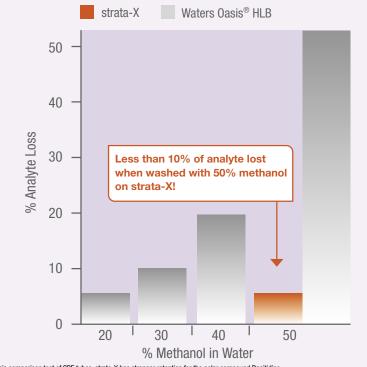
Sample: 50µL extract from wash fraction

Mobile Phase: A: 20mM KH₂PO₄ (pH 7.0) B: acetonitrile

Gradient: A/B (80:20) hold for 3 minutes to A/B (10:90) in 3 minutes hold for 3 minutes

Flow rate: 1.0mL/min Temperature: 25°C Detector: UV @ 210nm Int. Standard: Propranolol





strata*

In this comparison test of SPE tubes, strata-X has stronger retention for the polar compound Ranitidine.

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Traditional Cleanup - Tubes

1mL (100/box)	3mL (50/box)				6mL (30/box)		
30mg/1mL	30mg/3mL	60mg/3mL	200mg/3mL	500mg/3mL	100mg/6mL	200mg/6mL	500mg/6mL
8B-S100-TAK	8B-S100-TBJ	8B-S100-UBJ	8B-S100-FBJ	8B-S100-HBJ	8B-S100-ECH	8B-S100-FCH	8B-S100-HCH

High-Throughput - 96-Well Plates

5mg/well	10mg/well	30mg/well	60mg/well
8E-S100-NGB	8E-S100-AGB	8E-S100-TGB	8E-S100-UGB

strata™X On-Line Extraction Cartridge

Order No.	Dimensions	Unit/Box	Price
00M-S033-B0-CB	strata-X on-line extraction cartridge, 25µm, 20 x 2.0mm	ea	
CH0-5845	Cartridge holder, 20mm	ea	

Large Sample Cleanup - Giga Tubes

12mL (20mL (20/box)	
500mg	1g	1g
8B-S100-HDG	8B-S100-JDG	8B-S100-JEG



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SPE Accessories Ordering Information

Vacuum Manifold

Order No.	Dimensions	Unit/Box	Price
AH0-7502	10-Position; Tall-Boy Vacuum Manifold Complete Assembly for Giga Tubes	ea	
AH0-6023	12-Position; Complete Assembly for 1, 3, 6mL Tubes	ea	
AH0-6024	24-Position; Complete Assembly for 1, 3, 6mL Tubes	ea	

Vacuum Manifold

Order No.	Dimensions	Unit/Box	Price	
Manifold				
AH0-7284	96-Well Plate Manifold Acrylic	ea		
Sealing Mat	ts			
AH0-7195 AH0-7362	Pierceable sealing mats, 96 square well Sealing tape pad	50/pk 10/pk		
Collection Plates				
AH0-7192 AH0-7193 AH0-7194 AH0-7408	0.35mL/well 96 square well collection plate 1mL/well 96 square well collection plate 2mL/well 96 square well collection plate Solvent waste reservoir tray	50/pk 50/pk 50/pk 50/pk		

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Technical Notes Available

Contact Phenomenex or your Local Phenomenex Distributor and Request a Technical Note Today.

- Extraction of Phenols from Water using strata-X (TN-001)
- Extraction of Nitroanilines from Water using strata-X (TN-003)
- Extraction of Acidic, Basic, and Neutral Compounds using strata-X (TN-004)
- TCAs Extracted from Serum using strata-X (TN-006)
- Fast Extraction of Acyclovir from Plasma using strata-X On-line Cartridge (TN-009)

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Phenomenex products are available worldwide. For the distributor in your country, contact Phenomenex USA, International Department by telephone, fax or e-mail: international@phenomenex.com.



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