Sample Preparation

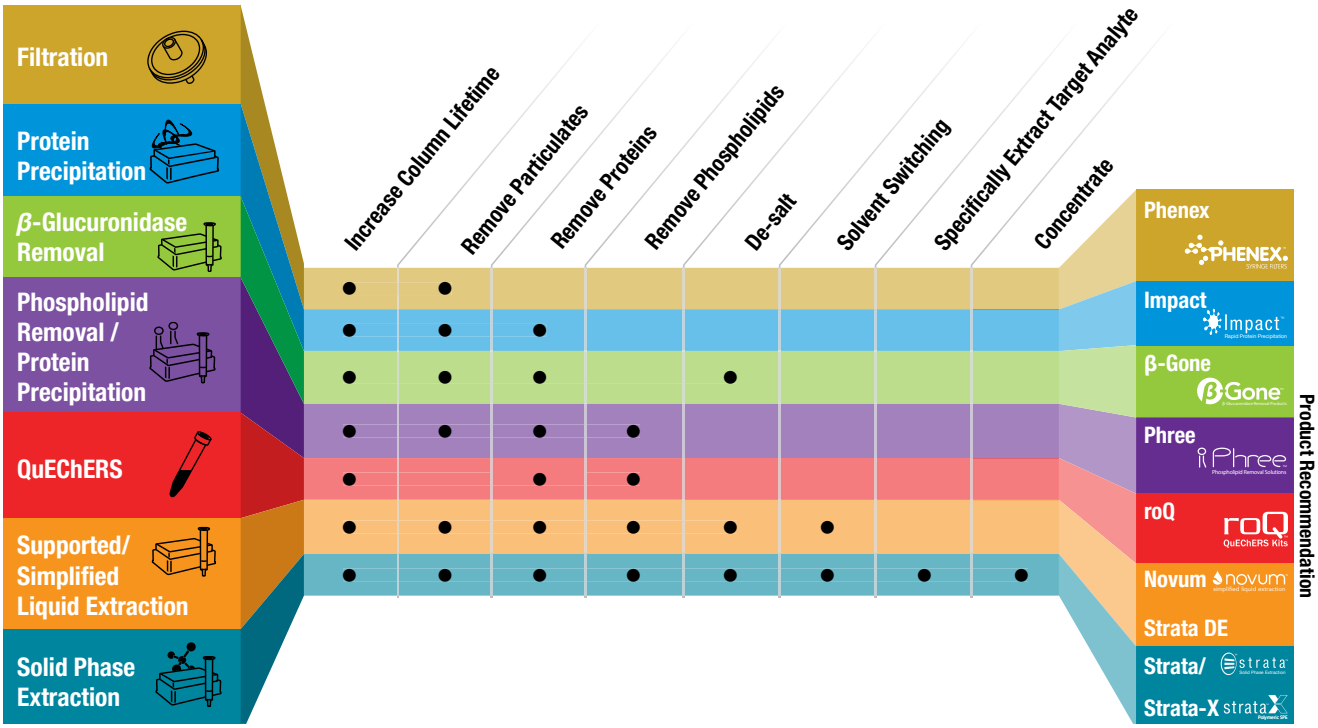
"Strata-X is an excellent all-around sorbent and we obtain high breakthrough volumes necessary to improve method quantitation limits."

Pedro A. Segura
Université de Montreal

47 - 82

The opinions stated herein are solely those of the speaker and not necessarily those of any company or organization.

Choose Your Sample Preparation Solution



Available Formats

	96-Well Plates	Microelution Plates	1, 3, and 6 mL Tubes	Giga™ Tubes (12 mL - 150 mL)	On-line Extraction Cartridge	Bulk Sorbent
Strata-X Polymeric SPE	X	X	X	X	X	X
Strata Traditional SPE	X		X	X	X	X
Novum SLE	X		X			
Strata DE	X			X		
Phree Phospholipid Removal Solutions	X		X			
Impact Protein Precipitation Plates	X					
β-Gone β-Glucuronidase Removal	X		X			

96-Well Plates

Microelution Plates

1, 3, and 6 mL Tubes

Giga™ Tubes (12 mL - 150 mL)

On-line Extraction Cartridge

Bulk Sorbent

Don't see the format you want? Contact Phenomenex or your local Phenomenex distributor for custom packed SPE phases

For Sepra™ Bulk Sorbent Material Characteristics and Ordering Information, see p. 388

Patent Pending

Faster, Easier, and More Reliable than Liquid-Liquid Extraction

2015 R&D 100 WINNER

2015 R&D 100 Award Recipient

- **Avoid inferior results due to emulsions**
- **Eliminate interferences from your samples**
- **Increase throughput with automatable formats**

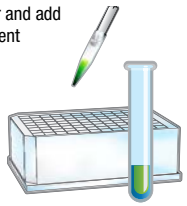
A Simplified Liquid Extraction

Novum SLE will instantly increase your throughput by eliminating time consuming steps and reducing the risk of analyte loss. If further time savings are necessary, Novum SLE can be easily automated for rapid, hands free sample cleanup.

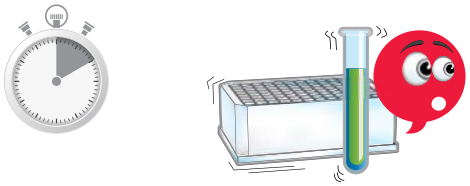
Slow and Laborious

Traditional Liquid-Liquid Extraction[1] Estimated Time Required = **25 minutes**

1. Dilute sample 1:1 with buffer or water and add extraction solvent

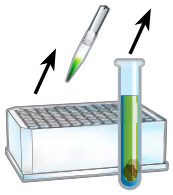


2. Mix for 10 minutes



3. Centrifuge for 10 minutes

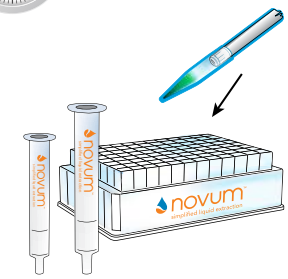
4. Pour off or freeze supernatant



Fast and Easy

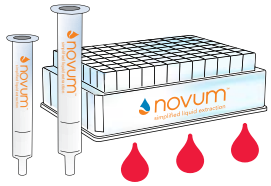
Novum Simplified Liquid Extraction (SLE) Estimated Time Required = **<15 minutes**

1. Dilute sample 1:1 with buffer or water and load onto Novum SLE sorbent using 2–15 seconds of vacuum



2. Wait 5 minutes

3. Apply elution solvent and allow to elute via gravity. Complete elution with 10 seconds of vacuum.



- **Rapid, automatable method for high-throughput cleanup**
- **Stop worrying about analyte loss due to emulsions**

For buffer and elution solvent recommendations, technical notes, demonstration videos, and more, visit:
www.phenomenex.com/Novum

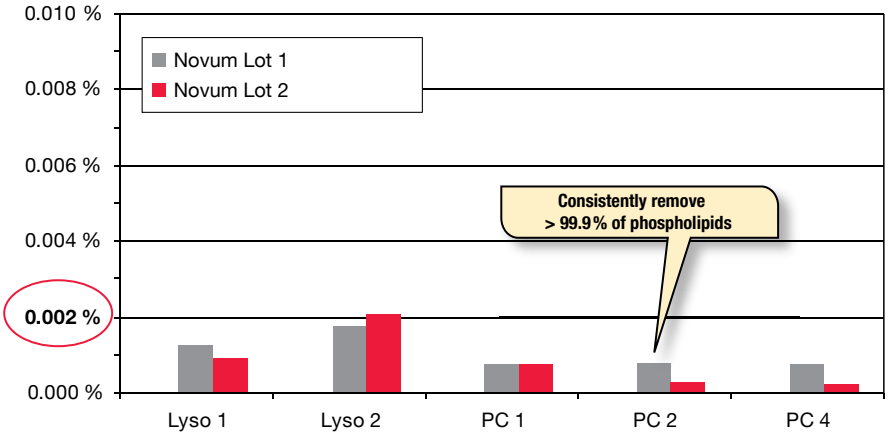
1. Russell Grant, Matthew Crawford, Brian Rappold, and Stacy Dee. Errors in Bioanalysis Due to Phospholipids – Definitive Measurement, Mechanism, and Management. ASMS 2011.

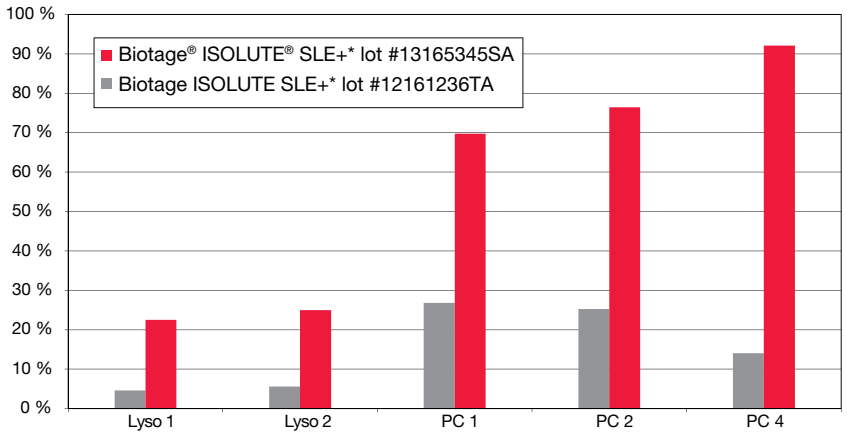
Patent Pending

Consistent Cleanup from Lot-to-Lot

As a unique, synthetic SLE sorbent you can expect Novum to provide reliable, more consistent cleanup from lot-to-lot as compared to traditional diatomaceous earth SLE.

Lot-to-Lot Phospholipid Breakthrough:
Novum SLE vs. Traditional Diatomaceous Earth SLE





Lyso 1: 1-Palmitoyl-2-OH-sn-glycero-phosphocholine (m/z 496-184)
Lyso 2: 1-Oleoyl-2-OH-sn-glycero-phosphocholine (m/z 522-184)
PC 1: 1-Palmitoyl-2-Oleoyl-sn-glycero-phosphocholine (m/z 761-184)
PC 2: 1-Stearoyl-2-Lindoleoyl-sn-glycero-phosphocholine (m/z 787-184)
PC 4: 1-Oleoyl-2-Lindoleoyl-sn-glycero-phosphocholine (m/z 784-184)

Plasma extractions were performed using 200 µL plates and ethyl acetate as an elution solvent. The recommended protocol provided with each product was followed. Comparative separations may not be representative of all applications.

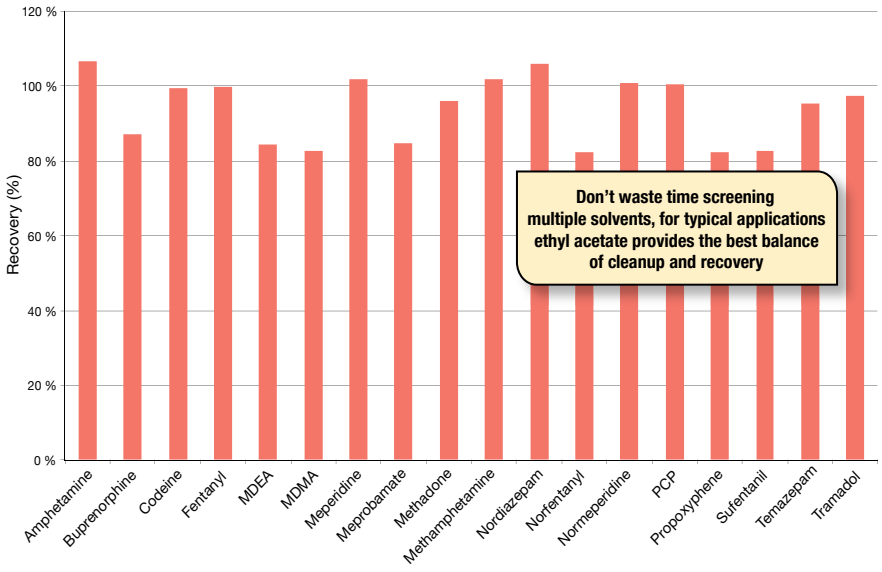
*Phenomenex is in no way affiliated with Biotage.

Patent Pending

Faster Method Development

Traditional diatomaceous earth SLE often requires a solvent screening process which leads to increased time and money spent on the method development process. For typical applications, Novum SLE provides excellent recovery and cleanup using ethyl acetate as an organic solvent which can help to reduce the amount of time required for method development.

Recovery of 18 Pain Management Drugs using a Single Extraction Method on Novum SLE



Extraction Method

A Simplified Procedure

1. Load diluted urine (diluted 1:1 with 0.5 M Ammonium hydroxide) onto Novum SLE MAX 96-well plate, apply vacuum for 2-15 seconds
2. Allow sample to soak into Novum SLE sorbent for 5 minutes
3. Elute with ethyl acetate

Analyte	% RSD
Amphetamine	3
Buprenorphine	5
Codeine	10
Fentanyl	6
MDEA	4
MDMA	4
Meperidine	9
Meprobamate	7
Methadone	2
Methamphetamine	12
Nordiazepam	1
Norfentanyl	3
Normeperidine	4
PCP	2
Propoxyphene	9
Sufentanil	11
Temazepam	2
Tramadol	9

Novum™ Simplified Liquid Extraction SLE

Patent Pending

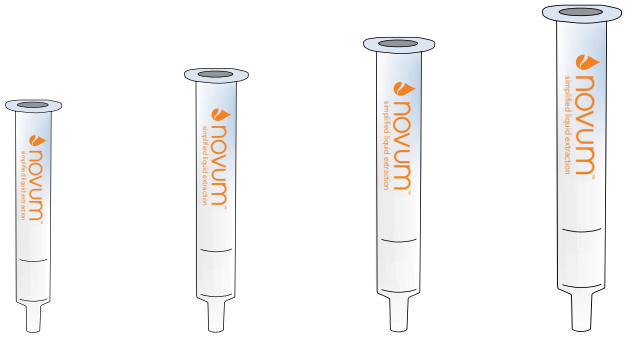
guarantee

If Novum SLE products do not perform as well or better than your current SLE product, return the product with comparative data within 45 days for a FULL REFUND.

A Variety of Formats to Fit Your Sample and Throughput Requirements

Tubes

Process samples as small as 100 µL or as large as 1 mL using Novum SLE tubes. Ideal for all types of applications including Bioanalytical, Food Safety, and Environmental.

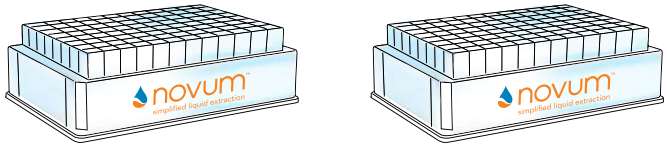


Ordering Information

Novum Simplified Liquid Extraction (SLE) Tubes				
Novum SLE Tubes	1 cc	3 cc	6 cc	12 cc
Maximum Sample Volume (before dilution)	100 µL	200 µL	500 µL	1 mL
Recommended Elution Volume	1.2 mL	1.8 mL	5 mL	10 mL
Part No.	8B-S138-FAK	8B-S138-5BJ	8B-S138-JCH	8B-S138-KDG
Unit	100/pk	50/pk	30/pk	20/pk

96-Well Plates

Process 96 samples at once in an easily automatable 96-well plate. Perfect for high-throughput applications.



Ordering Information

Novum Simplified Liquid Extraction (SLE) 96-Well Plates		
Novum SLE 96-Well Plates	MINI	MAX
Maximum Sample Volume (before dilution)	150 µL	200 µL
Recommended Elution Volume	1 mL	1.8 mL
Part No.	8E-S138-FGA	8E-S138-5GA
Unit	1/pk	1/pk

For accessories that are compatible with Novum Simplified Liquid Extraction (SLE) Products, see pp. 75-78

For more information about Phenomenex sample preparation products, visit **www.phenomenex.com/sampleprepinfo**

Strata® DE Diatomaceous Earth SLE

guarantee

If Strata DE products do not perform as well or better than your current SLE product of similar mass and size, return the product with comparative data within 45 days for a FULL REFUND.

new A Cost Effective Supported Liquid Extraction (SLE) Solution

Quickly and easily improve your liquid-liquid extractions by following a short, automatable two step extraction process. Packed with Diatomaceous Earth, Strata DE is a great alternative to traditional SLE products such as Biotage® ISOLUTE® SLE+, Thermo Hypersep™ SLE, and Agilent® Chem Elut™ SLE.

Pre-treatment:	Combine 100 µL of spiked urine, 15 µL Campbell Beta-Glucuronidase (part number: DR2102), 35 µL 100 mM Ammonium Acetate (pH 4), and 150 µL of 100 mM Ammonium Bicarbonate (pH 10).
96-Well Plates:	Strata DE 400 µL 96-Well Plate; Biotage ISOLUTE SLE+ 400 µL 96-Well Plate
Part No.:	8E-S325-5GB (Strata DE)
Load:	300 µL pre-treated sample onto plate (apply vacuum or positive pressure to pull/push sample into sorbent if necessary)
Wait:	6 minutes
Elute:	3x 600 µL Dichloromethane/IPA (95:5)
Apply:	Vacuum or apply positive pressure at 5-10" Hg for 10 seconds
Dry:	Sample under slow stream of Nitrogen at 30 °C
Reconstitute:	100 µL 0.1% Formic Acid/Methanol (4:1) with internal standard

Recovery Values and % CVs: Strata DE vs. Biotage ISOLUTE SLE+

	Strata DE		Biotage ISOLUTE SLE+	
	Recovery	%CV (n=8)	Recovery	%CV (n=8)
6-MAM	98	9	88	16
Alprazolam	104	10	98	11
Benzoylecgonine	88	6	98	11
Buprenorphine	93	7	102	15
Codeine	99	12	93	9
Diazepam	107	7	104	6
Fentanyl	85	5	94	8
Hydrocodone	104	11	93	11
Hydromorphone	95	9	93	11
Lorazepam	94	8	98	8
Methamphetamine	92	16	102	8
Morphine	98	12	94	12
Norbuprenorphine	101	11	92	11
Nordiazepam	100	9	92	8
Norfentanyl	113	7	110	11
Oxycodone	97	5	93	11
PCP	90	7	98	6

Tubes

Ideal for large volume cleanups such as Food and Environmental applications.

Ordering Information

Strata DE (Diatomaceous Earth SLE Tubes)		
Strata DE Tube	2 mL Capacity, 12 cc	20 mL Capacity, 60 cc
Maximum Sample Volume (before dilution)	2 mL	17 mL
Recommended Elution Volume	2x 5 mL	3x 20 mL
Part No.	8B-S325-KDG	8B-S325-VFF
Unit	20/pk	16/pk

96-Well Plates

Ideal for smaller volume, high-throughput cleanups such as Bioanalytical samples.

Ordering Information

Strata DE (Diatomaceous Earth SLE) 96-Well Plates		
Strata DE 96-Well Plates	200 µL	400 µL
Maximum Sample Volume (before dilution)	200 µL	300 µL
Recommended Elution Volume	2x 600 µL	3x 600 µL
Part No.	8E-S325-5GB	8E-S325-FGB
Unit	2/pk	2/pk

For accessories that are compatible with Strata DE Supported Liquid Extraction (SLE) Products, see pp. 75-78

For more information about Phenomenex sample preparation products, visit **www.phenomenex.com/sampleprepinfo**

Recommended volumes are the expected loadability for most samples, however, it may be possible to load more than the stated capacity without breakthrough of the sample.

Comparative separations may not be representative of all applications.

Rapid Cleanup of Hydrolyzed Urine

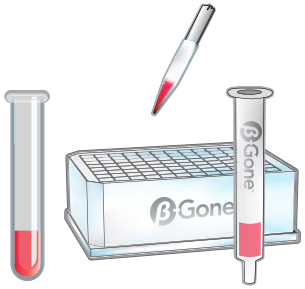
β-Gone β-Glucuronidase Removal Products are designed to target and remove β-glucuronidase from hydrolyzed urine samples without requiring additional time or method development. In a single step and in less than 1 minute, your hydrolyzed samples are ready for analysis.

- **Increase HPLC/UHPLC column lifetime**
- **Reduce mass spec maintenance**
- **Maintain the selectivity of your HPLC/UHPLC column**

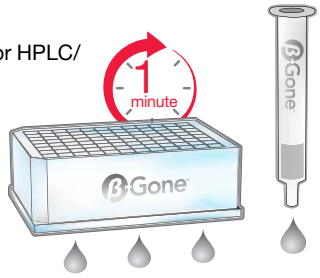
guarantee

If β-Gone β-Glucuronidase Removal Products do not perform as well or better than your current β-glucuronidase removal method, return the products with comparative data within 45 days for a FULL REFUND.

1 Load
hydrolyzed urine onto β-Gone β-Glucurbonidase Removal Tube or 96-Well Plate. Apply vacuum, positive pressure, or centrifuge.

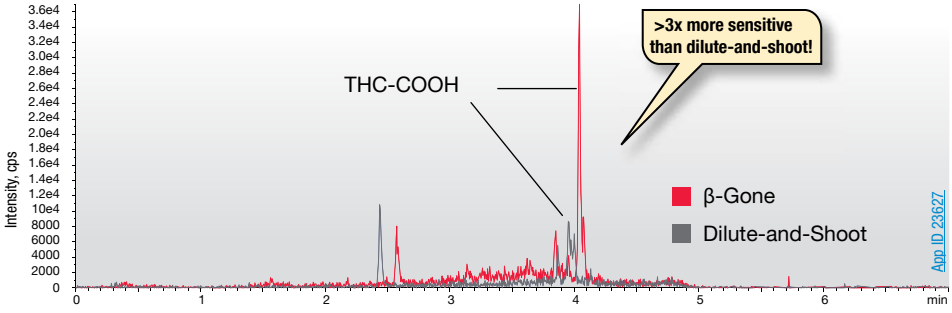


2 Collect
clean samples for HPLC/UHPLC analysis



Increase Your Sensitivity:

β-Gone vs. Dilute-and-Shoot



β-Gone Procedure: To 200 µL spiked urine (spiked at 100 ng/mL), add 133 µL 0.1 % Formic acid in Methanol. Pass through β-Gone tube or 96-well plate and collect eluent. Dilute-and-Shoot Procedure: Dilute spiked urine (spiked at 100 ng/mL) 10-fold with 0.1 % Formic acid in Water.

Column: Kinetex® 2.6 µm Biphenyl
Dimensions: 50 x 2.1 mm
Mobile Phase: A: 0.1 % Formic acid in Water
B: 0.1 % Formic acid in Acetonitrile
Gradient:

Time (min)	% B
0	5
3	95
4	95
4.1	5

Flow Rate: 500 µL/min
Temperature: Ambient
Detection: MS/MS (SCIEX API 4000™)

Ordering Information

β-Gone Beta-Glucuronidase Removal Products

Part No.	Description	Unit
8B-S139-TAK	1 mL Tubes, Recombinant Enzyme	100/Box
8B-S322-DAK	1 mL Tubes, Non-Recombinant Enzyme	100/Box
8E-S139-TGA	96-Well Plate, Recombinant Enzyme	1/Box
8E-S322-DGA	96-Well Plate, Non-Recombinant Enzyme	1/Box
8N-S323-TUK	2 mL Centrifuge Tubes, Recombinant and Non-Recombinant Enzyme	100/Box

Watch the Webinar
Learn how to instantly improve your sensitivity without introducing extra steps into your workflow!
www.phenomenex.com/BetaGone

Impact™
Rapid Protein Precipitation

guarantee

If Impact does not perform as well or better than your current protein precipitation plate with similar specifications, return the product with comparative data within 45 days for a FULL REFUND.

Impact

Rapid Protein Precipitation

- **Quickly cleanup sample by passing biological samples through the Impact filter**
- **Increase sensitivity of your analysis by eliminating proteins which contribute to baseline noise**
- **Increase reproducibility with the leak-free membrane, preventing premature sample breakthrough and incomplete protein precipitation**

Can retain acetonitrile with no leaks for up to 25 minutes

Compatible Solvents	Solvent : Sample Ratio
Acetonitrile	3:1 to 4:1
Methanol	4:1
Maximum Total Combined Liquid Volume (Organic Solvent plus Biological Sample)	
96-well plates	1.2 mL
Recommended Biological Sample Volumes	
96-well plates	25-400 µL
Leak Resistant Time	
96-well plates	Up to 25 minutes with no vacuum/pressure

Ordering Information

Impact Precipitation Products

Part No.	Description	Unit
Impact Precipitation Products		
CE0-7565	Impact Protein Precipitation, Square Well, Filter Plate, 2 mL	2/pk
CE0-7566	Impact Protein Precipitation, Square Well, Long Drip, Filter Plate, 2 mL	2/pk
Impact Starter Kit for Protein Precipitation		
CE0-8201	Impact Protein Precipitation Plate (CE0-7565) (2 ea) Collection Plate 2 mL (2 ea) Sealing Mat, Santoprene™ (AH0-8199) (2 ea)	ea

For Accessories, see pp. 75-78

General Protocol

1. **Dispense**
Organic solvent into the wells of the Impact plate in a volume of 3 - 4x the volume of the intended plasma or tissue homogenate sample. Recommended solvents and maximum volume of sample and precipitation solvent are listed on this page.

2. **Add***
Plasma or tissue homogenate directly and forcefully into the organic solvent, maintain a final ratio of 3:1 to 4:1 organic solvent:sample. Recommended sample volumes are listed on this page.

3. **Vortex†**
2 minutes at maximum possible speed, taking care not to allow solvent spillage. Sample can stand for up to 25 minutes.

4. **Filter**
Centrifuge:
Place the Impact plate on top of a collection plate and centrifuge at 500 g for 5 minutes or until filtrate is collected.

Vacuum:
Place the Impact plate onto a suitable 96-well sample manifold or robot. Ensure that a 96-well collection plate is positioned inside the manifold or under the Impact plate. Vacuum at 2 - 7 inch Hg for up to 5 minutes or until filtrate is collected.

Positive Pressure:
Place the Impact plate on top of a collection plate and apply 2 - 5 psi using a positive pressure manifold.

* A 3:1 v/v ratio of organic solvent to biological sample will dilute your sample less. In contrast, a 4:1 v/v ratio of organic solvent to biological sample will ensure a more complete precipitation. A 4:1 v/v ratio is recommended when using methanol.

† When used with a liquid-handling instrument or automation, aspirate/dispense cycles may be used to promote in-tip mixing and precipitation. This will ensure complete precipitation and filtration. Vortexing is not necessary when in-tip precipitation is performed.

Eliminate Ion Suppression with Phree

2013 R&D 100 Award Recipient

- **Consistently remove > 99 % of phospholipids to increase LC/MS sensitivity**
- **Simultaneously remove interfering proteins**
- **No additional time required, the Phree method can be performed in the same amount of time as a protein precipitation procedure**
- **Skip the method development; one method for acids, bases, and neutrals**

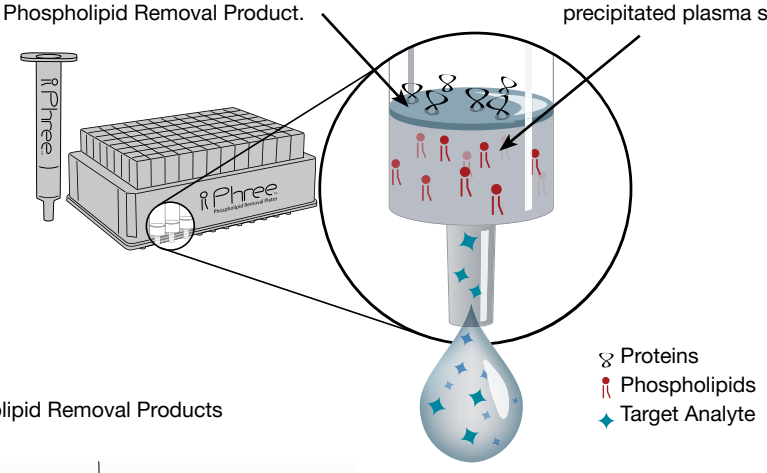
How it Works:

Remove Proteins

Solvent Shielding Technology™ prevents dripping of organic solvent, allowing for protein precipitation within the wells of the Phree Phospholipid Removal Product.

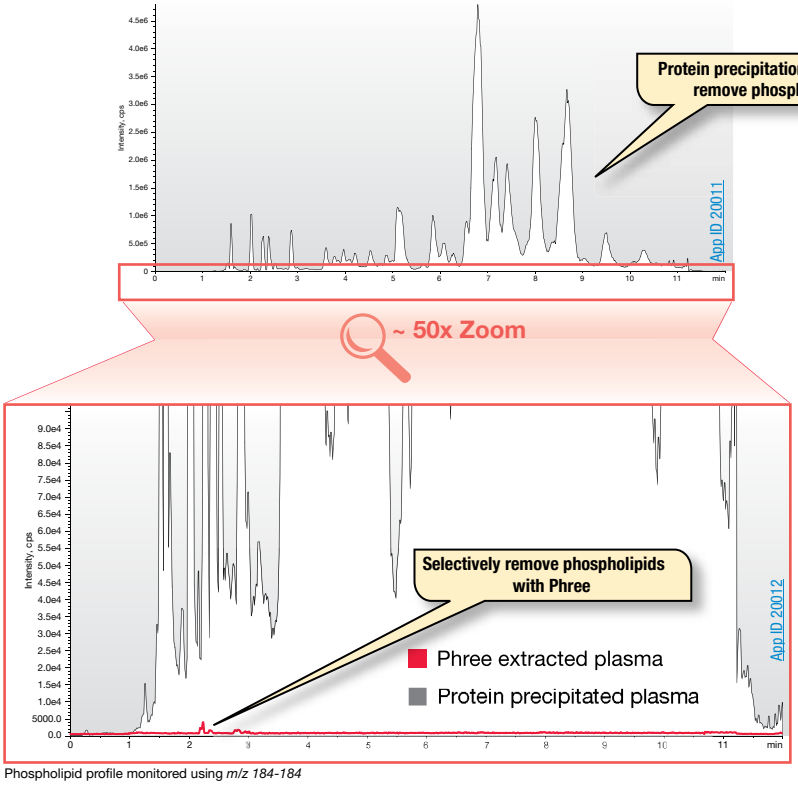
Eliminate Phospholipids

The Phree sorbent selectively removes phospholipids from precipitated plasma samples.



Total Phospholipid Profile

Protein Precipitation vs. Phree Phospholipid Removal Products



Phospholipid profile monitored using *m/z 184-184*

Plasma Cleanup: 100 µL plasma plus 300 µL acetonitrile with 1 % formic acid
Column: Kinetex® 2.6 µm C18 100Å
Dimensions: 50 x 2.1 mm
Part No.: 00B-4462-AN
Mobile Phase: A: 0.1 % Formic acid in Water
B: 0.1 % Formic acid in Methanol

Gradient:	**Time (min)**	**% B**
	0	60
	0.5	95
	15.5	95
	15.51	60
	19.5	60

Flow Rate: 400 µL/min
Detection: Mass Spectrometer (MS) @ 425 °C; 184 amu
Temperature: 22 °C

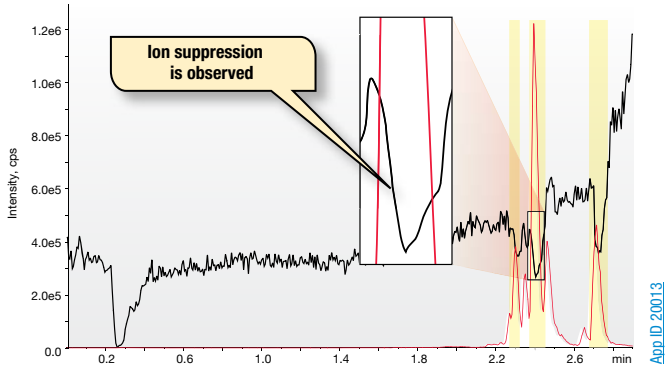
guarantee

If Phree Phospholipid Removal products do not perform as well or better than your current phospholipid removal products, return the product with comparative data within 45 days for a FULL REFUND.

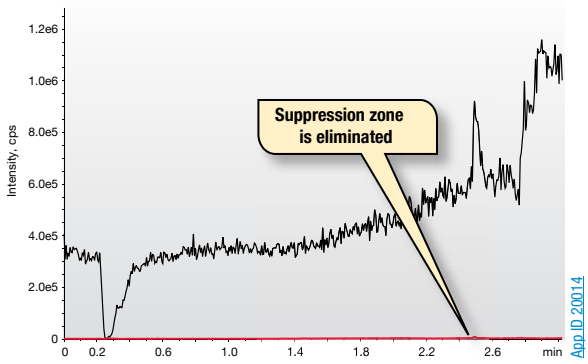
Reduce Ion Suppression

The presence of phospholipids in plasma samples produces zones of ion suppression that correlate exactly with the phospholipid elution profile when analyzed via mass spectrometer (MS).

Protein Precipitated Plasma



Phree Extracted Plasma



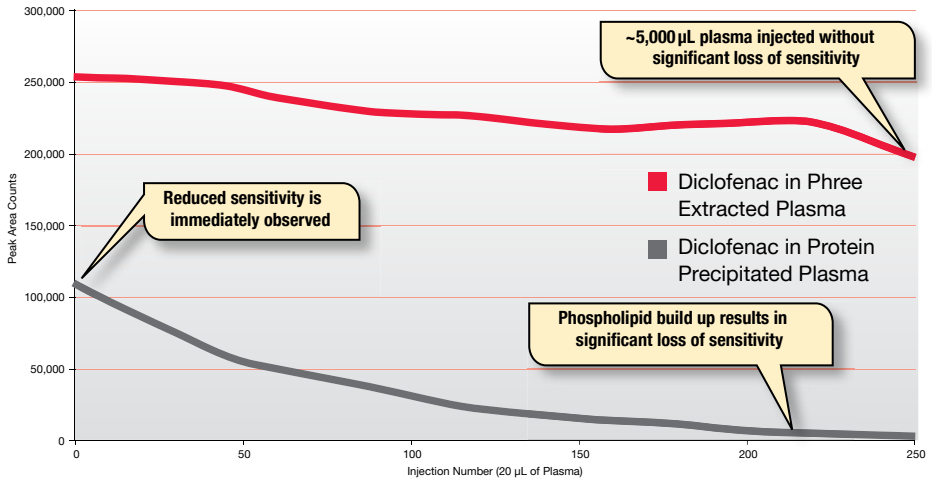
Suppression Zone
Phospholipids *m/z 184-184*
Amoxapine *m/z 314-271*

Amoxapine was infused post-column to establish an ion suppression/enhancement profile with both protein precipitated plasma (left) and Phree extracted plasma (right), showing that Phree can successfully reduce ion suppression.

Maximize Sensitivity and Column Lifetime

Phospholipids reduce the sensitivity of the MS signal and shorten column lifetime when they build up over time.

Column Sensitivity after 250 Injections



To assess the effect of phospholipid build up, repetitive 20 µL injections of diclofenac in protein precipitated plasma versus diclofenac in Phree extracted plasma were made.

Ordering Information

Phree Phospholipid Removal Products

Part No.	Description	Unit
8B-S133-TAK	Phree Phospholipid Removal Tabbed 1 mL Tubes	100/pk
8E-S133-TGB	Phree Phospholipid Removal 96-Well Plates	2/pk

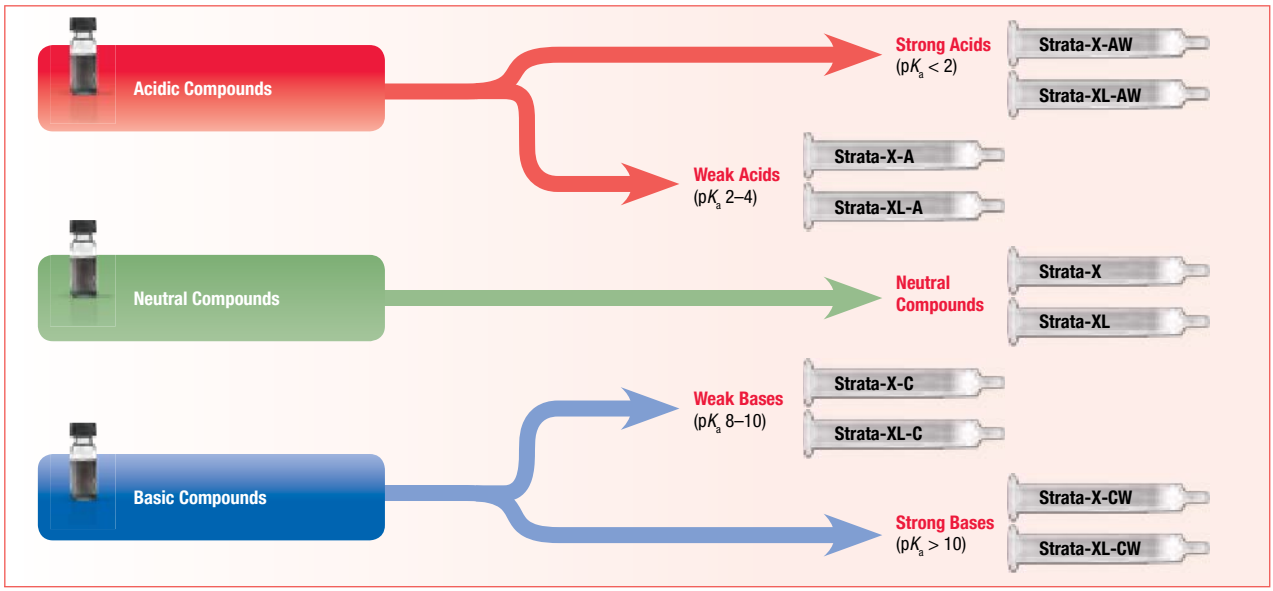
For accessories that are compatible with Phree Phospholipid Removal Products, see pp. 75-78

U.S. Patent No. 7,119,145

Strata-X

Step 1. Select a Sorbent

Compound-Directed Phase Selection



Specialty Sorbents	Application	Phase Description
Strata-X-Drug B	Basic Drugs of Abuse	Proprietary strong cation-exchange sorbent that eliminates the need to condition / equilibrate the sorbent.
Strata-X-Drug N	Neutral Drugs of Abuse	Proprietary reversed phase sorbent that eliminates the need to condition / equilibrate the sorbent.

Step 2. Select a Sorbent Mass

Loading Capacity Chart

Strata-X Phase	Plasma /Serum	Urine	Filtered Tissue Homogenates	Water (particulate-free)	Water (particulate-laden)	Mass (mg in tube)
Strata-X, X-C, X-CW, X-A, X-AW	100 µL	250 µL	10 mg	N.A.	N.A.	10 mg
	250 µL	1 mL	50 mg	N.R.	N.R.	30 mg
	500 µL	2 mL	100 mg	N.R.	N.R.	60 mg
	1 mL	4 mL	150 mg	50 mL	25 mL	100 mg
	N.A.	8 mL	300 mg	100 mL	50 mL	200 mg
	N.A.	20 mL	500 mg	500 mL	100 mL	500 mg
Strata-XL, XL-C, XL-CW, XL-A, XL-AW	50 µL	125 µL	5 mg	N.A.	N.A.	10 mg
	125 µL	500 µL	25 mg	N.R.	N.R.	30 mg
	250 µL	1 mL	50 mg	N.R.	N.R.	60 mg
	500 µL	2 mL	75 mg	25 mL	13 mL	100 mg
	N.A.	4 mL	150 mg	50 mL	25 mL	200 mg
	N.A.	10 mL	250 mg	250 mL	50 mL	500 mg

N.A. = Not Applicable (not commonly used)
N.R. = Not Recommended (may not provide expected results)

See the following pages for specific phase details and general extraction protocols.

General Extraction Protocols

Bases

Strata-X-C / Strata-XL-C

Strong Cation-Exchange & Reversed Phase

for Bases with $pK_a \leq 10.5$

Condition
1 mL Methanol
Equilibrate
1 mL Acidified Water
Load
Diluted Acidified Sample
Wash
1 mL 0.1 N HCl in water (collect this fraction to analyze Polar Neutrals)
Wash
1 mL 0.1 N HCl in Methanol (collect this fraction to analyze Neutrals/Acids)
Elute Bases
2x 500 µL 5 % NH_4OH in Methanol

Strata-X-CW / Strata-XL-CW

Weak Cation-Exchange & Reversed Phase

for Bases with $pK_a > 8$

Condition
1 mL Methanol
Equilibrate
1 mL Water, pH 6-7
Load
Diluted Sample, pH 6-7
Wash
1 mL Water, pH 6-7
Wash
1 mL Methanol (collect this fraction to analyze Neutrals/Acids)
Elute Any Base
2x 500 µL 5 % Formic Acid in Methanol
Elute Weak Bases
2x 500 µL 5 % NH_4OH in Methanol

Neutrals

Strata-X / Strata-XL

Reversed Phase

for Neutral Compounds

Condition
1 mL Methanol
Equilibrate
1 mL Water
Load
Diluted Sample
Wash
1 mL 5-60 % Methanol
Elute
2x 500 µL 2 % Formic Acid in Methanol/Acetonitrile

Acids

Strata-X-A / Strata-XL-A

Strong Anion-Exchange & Reversed Phase

for Acids with $pK_a > 2$

Condition
1 mL Methanol
Equilibrate
1 mL Water, pH 6-7
Load
Diluted Sample, pH 6-7
Wash
1 mL 25 mM Ammonium Acetate Buffered, pH 6-7
Wash
1 mL Methanol (collect this fraction to analyze Neutral/Bases)
Elute Acids
2x 500 µL 5 % Formic Acid in Methanol

Strata-X-AW / Strata-XL-AW

Weak Anion-Exchange & Reversed Phase

for Acids with $pK_a \leq 5$

Condition
1 mL Methanol
Equilibrate
1 mL Water, pH 6-7
Load
Diluted Sample, pH 6-7
Wash
1 mL 25 mM Ammonium Acetate Buffered, pH 6-7
Wash
1 mL Methanol
Elute Any Acid
2x 500 µL 5 % NH_4OH in Methanol
Elute Weak Acids
2x 500 µL 5 % Formic Acid in Methanol

*Based on 30 mg/1 mL sorbent mass.
The above is a convenient starting point for SPE method development.
Further optimization may be required to tailor the method to your specific needs.

Strata®-X Polymeric SPE

U.S. Patent No. 7,119,145

Strata-X and Strata-XL

A reversed phase functionalized polymeric sorbent that gives strong retention of neutral, acidic, or basic compounds under aggressive, high organic wash conditions.

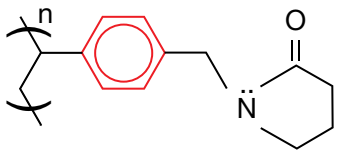
guarantee

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, return the product with comparative data within 45 days for a FULL REFUND.

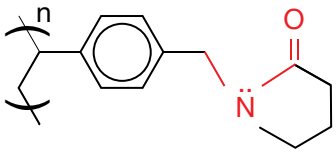
	Strata-X, 33 µm, 85 Å	Strata-XL, 100 µm, 300 Å
High Concentration Samples	X	
Small Target Analytes (< 10 kDa)	X	
Large Target Analytes (> 10 kDa)		X
Large Volume Samples		X
Viscous Samples		X

3 Mechanisms of Retention

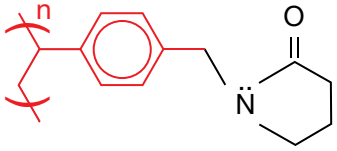
π-π Bonding



Hydrogen Bonding Dipole-Dipole Interactions



Hydrophobic Interaction



Strata-X

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S100-TAK**	1 mL (100/box)
	30 mg	8B-S100-TBJ	3 mL (50/box)
	60 mg	8B-S100-UBJ**	3 mL (50/box)
	100 mg	8B-S100-EBJ	3 mL (50/box)
	100 mg	8B-S100-ECH	6 mL (30/box)
	200 mg	8B-S100-FBJ	3 mL (50/box)
	200 mg	8B-S100-FCH	6 mL (30/box)
	500 mg	8B-S100-HBJ	3 mL (50/box)
	500 mg	8B-S100-HCH	6 mL (30/box)
Giga™ Tube			
	500 mg	8B-S100-HDG	12 mL (20/box)
	1 g	8B-S100-JDG	12 mL (20/box)
	1 g	8B-S100-JEG	20 mL (20/box)
	2 g	8B-S100-KEG	20 mL (20/box)
	5 g	8B-S100-LFF	60 mL (16/box)
Teflon® Tube			
	200 mg	8B-S100-FBJ-T	3 mL (50/box)
	200 mg	8B-S100-FDG-T	12 mL (20/box)
96-Well Plate			
	10 mg	8E-S100-AGB	2 Plates/Box
	30 mg	8E-S100-TGB	2 Plates/Box
	60 mg	8E-S100-UGB	2 Plates/Box
96-Well Microelution Plate			
	2 mg	8M-S100-4GA	ea

On-line Extraction Cartridge

Description	Part Number	Unit/Box
Strata-X on-line extraction cartridge, 20 x 2.0 mm	00M-S033-B0-CB	ea
Cartridge holder, 20 mm	CH0-5845	ea

**Tab-less tubes available. Contact Phenomenex for details.

For Large Volume Cleanup/Flash Analysis, use Giga Tubes
For SPE Vacuum Manifolds and Accessories, see pp. 76-78

Strata-XL

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S043-TAK	1 mL (100/box)
	60 mg	8B-S043-UBJ	3 mL (50/box)
	100 mg	8B-S043-EBJ	3 mL (50/box)
	200 mg	8B-S043-FBJ	3 mL (50/box)
	200 mg	8B-S043-FCH	6 mL (30/box)
	500 mg	8B-S043-HCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S043-KDG	12 mL (20/box)
	2 g	8B-S043-KEG	20 mL (20/box)
	5 g	8B-S043-LEG	20 mL (20/box)
	5 g	8B-S043-LFF	60 mL (16/box)
	10 g	8B-S043-MFF	60 mL (16/box)
96-Well Plate			
	30 mg	8E-S043-TGB	2 Plates/Box

* To control flow rate with Strata-XL, use a stopcock (AH0-6048) when processing samples with a vacuum manifold.

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Strata®-X Polymeric SPE

guarantee

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U.S. Patent No. 7,119,145

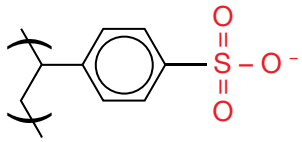
Strata-X-C and Strata-XL-C

A strong cation-exchange functionalized polymeric sorbent that allows for complete retention of basic compounds with a pK_a less than 10.5, making 100 % organic wash conditions possible.

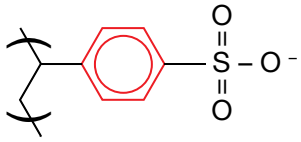
	Strata-X-C, 33 µm, 85 Å	Strata-XL-C, 100 µm, 300 Å
High Concentration Samples	X	
Small Target Analytes (< 10 kDa)	X	
Large Target Analytes (> 10 kDa)		X
Large Volume Samples		X
Viscous Samples		X

3 Mechanisms of Retention

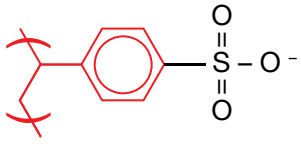
Strong Cation-Exchange



π-π Bonding



Hydrophobic Interaction



Strata-X-C

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S029-TAK**	1 mL (100/box)
	30 mg	8B-S029-TBJ	3 mL (50/box)
	60 mg	8B-S029-UBJ**	3 mL (50/box)
	100 mg	8B-S029-EBJ	3 mL (50/box)
	100 mg	8B-S029-ECH	6 mL (30/box)
	200 mg	8B-S029-FBJ	3 mL (50/box)
	200 mg	8B-S029-FCH	6 mL (30/box)
	500 mg	8B-S029-HBJ	3 mL (50/box)
	500 mg	8B-S029-HCH	6 mL (30/box)
Giga™ Tube			
	500 mg	8B-S029-HDG	12 mL (20/box)
	1 g	8B-S029-JDG	12 mL (20/box)
	1 g	8B-S029-JEG	20 mL (20/box)
	2 g	8B-S029-KEG	20 mL (20/box)
	5 g	8B-S029-LFF	60 mL (16/box)
96-Well Plate			
	10 mg	8E-S029-AGB	2 Plates/Box
	30 mg	8E-S029-TGB	2 Plates/Box
	60 mg	8E-S029-UGB	2 Plates/Box
96-Well Microelution Plate			
	2 mg	8M-S029-4GA	ea

On-line Extraction Cartridge

Description	Part Number	Unit/Box
Strata-X-C on-line extraction cartridge, 20 x 2.0 mm	00M-S048-B0-CB	ea
Cartridge holder, 20 mm	CH0-5845	ea

Strata-XL-C

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S044-TAK	1 mL (100/box)
	60 mg	8B-S044-UBJ	3 mL (50/box)
	100 mg	8B-S044-EBJ	3 mL (50/box)
	100 mg	8B-S044-ECH	6 mL (30/box)
	200 mg	8B-S044-FBJ	3 mL (50/box)
	200 mg	8B-S044-FCH**	6 mL (30/box)
	500 mg	8B-S044-HCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S044-KEG	20 mL (20/box)
	5 g	8B-S044-LEG	20 mL (20/box)
	5 g	8B-S044-LFF	60 mL (16/box)
	10 g	8B-S044-MFF	60 mL (16/box)
96-Well Plate			
	30 mg	8E-S044-TGB	2 Plates/Box

**Tab-less tubes available. Contact Phenomenex for details.

For Large Volume Cleanup/Flash Analysis, use Giga Tubes
For SPE Vacuum Manifolds and Accessories, see pp. 76-78

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Strata®-X Polymeric SPE

U.S. Patent No. 7,119,145

Strata-X-CW and Strata-XL-CW

A weak cation-exchange functionalized polymeric sorbent that allows for complete retention of basic compounds with a pK_a greater than 8, including quaternary amines, making 100 % organic wash conditions possible.

guarantee

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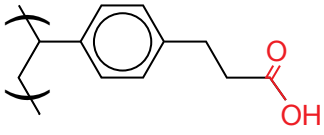
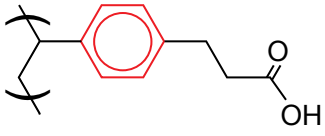
	Strata-X-CW, 33 µm, 85 Å	Strata-XL-CW, 100 µm, 300 Å
High Concentration Samples	X	
Small Target Analytes (< 10 kDa)	X	
Large Target Analytes (> 10 kDa)		X
Large Volume Samples		X
Viscous Samples		X

3 Mechanisms of Retention

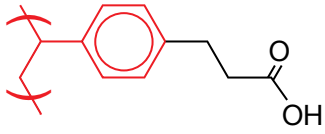
Weak Cation-Exchange



π-π Bonding



Hydrophobic Interaction



Strata-X-CW

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S035-TAK**	1 mL (100/box)
	30 mg	8B-S035-TBJ	3 mL (50/box)
	60 mg	8B-S035-UBJ**	3 mL (50/box)
	100 mg	8B-S035-ECH	6 mL (30/box)
	200 mg	8B-S035-FBJ	3 mL (50/box)
	200 mg	8B-S035-FCH	6 mL (30/box)
	500 mg	8B-S035-HBJ	3 mL (50/box)
	500 mg	8B-S035-HCH	6 mL (30/box)
Giga™ Tube			
	1 g	8B-S035-JDG	12 mL (20/box)
	1 g	8B-S035-JEG	20 mL (20/box)
	2 g	8B-S035-KEG	20 mL (20/box)
	5 g	8B-S035-LFF	60 mL (16/box)
96-Well Plate			
	10 mg	8E-S035-AGB	2 Plates/Box
	30 mg	8E-S035-TGB	2 Plates/Box
	60 mg	8E-S035-UGB	2 Plates/Box
96-Well Microelution Plate			
	2 mg	8M-S035-4GA	ea

On-line Extraction Cartridge

Description	Part Number	Unit/Box
Strata-X-CW on-line extraction cartridge, 20 x 2.0 mm	00M-S036-B0-CB	ea
Cartridge holder, 20 mm	CH0-5845	ea

Strata-XL-CW

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S052-TAK	1 mL (100/box)
	60 mg	8B-S052-UBJ	3 mL (50/box)
	100 mg	8B-S052-EBJ	3 mL (50/box)
	100 mg	8B-S052-ECH	6 mL (30/box)
	200 mg	8B-S052-FBJ	3 mL (50/box)
	200 mg	8B-S052-FCH	6 mL (30/box)
	500 mg	8B-S052-HCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S052-KEG	20 mL (20/box)
96-Well Plate			
	30 mg	8E-S052-TGB	2 Plates/Box

**Tab-less tubes available. Contact Phenomenex for details.

For Large Volume Cleanup/Flash Analysis, use Giga Tubes
For SPE Vacuum Manifolds and Accessories, see pp. 76-78

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U.S. Patent No. 7,119,145

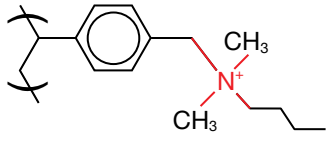
Strata-X-A and Strata-XL-A

A strong anion-exchange functionalized polymeric sorbent that allows for complete retention of weakly acidic compounds with pK_a greater than 2, making 100 % organic wash conditions possible.

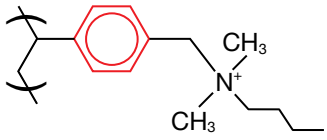
	Strata-X-A, 33 µm, 85 Å	Strata-XL-A, 100 µm, 300 Å
High Concentration Samples	X	
Small Target Analytes (< 10 kDa)	X	
Large Target Analytes (> 10 kDa)		X
Large Volume Samples		X
Viscous Samples		X

3 Mechanisms of Retention

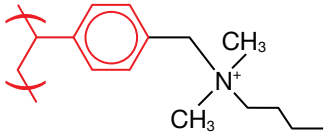
Strong Anion-Exchange



π-π Bonding



Hydrophobic Interaction



Strata-X-A

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S123-TAK**	1 mL (100/box)
	30 mg	8B-S123-TBJ	3 mL (50/box)
	60 mg	8B-S123-UBJ	3 mL (50/box)
	100 mg	8B-S123-EBJ	3 mL (50/box)
	100 mg	8B-S123-ECH	6 mL (30/box)
	200 mg	8B-S123-FBJ	3 mL (50/box)
	200 mg	8B-S123-FCH	6 mL (30/box)
	500 mg	8B-S123-HBJ	3 mL (50/box)
	500 mg	8B-S123-HCH	6 mL (30/box)
Giga™ Tube			
	500 mg	8B-S123-HDG	12 mL (20/box)
	1 g	8B-S123-JDG	12 mL (20/box)
	1 g	8B-S123-JEG	20 mL (20/box)
	2 g	8B-S123-KEG	20 mL (20/box)
	5 g	8B-S123-LFF	60 mL (16/box)
96-Well Plate			
	10 mg	8E-S123-AGB	2 Plates/Box
	30 mg	8E-S123-TGB	2 Plates/Box
	60 mg	8E-S123-UGB	2 Plates/Box
96-Well Microelution Plate			
	2 mg	8M-S123-4GA	ea

Strata-XL-A

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S053-TAK	1 mL (100/box)
	60 mg	8B-S053-UBJ	3 mL (50/box)
	100 mg	8B-S053-EBJ	3 mL (50/box)
	100 mg	8B-S053-ECH	6 mL (30/box)
	200 mg	8B-S053-FBJ	3 mL (50/box)
	200 mg	8B-S053-FCH	6 mL (30/box)
	500 mg	8B-S053-HCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S053-KEG	20 mL (20/box)
	5 g	8B-S053-LFF	60 mL (16/box)
	10 g	8B-S053-MFF	60 mL (16/box)
96-Well Plate			
	30 mg	8E-S053-TGB	2 Plates/Box

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U.S. Patent No. 7,119,145

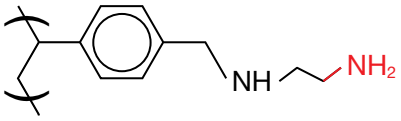
Strata-X-AW and Strata-XL-AW

A weak anion-exchange functionalized polymeric sorbent that allows for complete retention of acidic compounds with pK_a less than 5, making 100 % organic wash conditions possible.

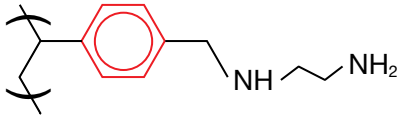
	Strata-X-AW, 33 µm, 85 Å	Strata-XL-AW, 100 µm, 300 Å
High Concentration Samples	X	
Small Target Analytes (< 10 kDa)	X	
Large Target Analytes (> 10 kDa)		X
Large Volume Samples		X
Viscous Samples		X

3 Mechanisms of Retention

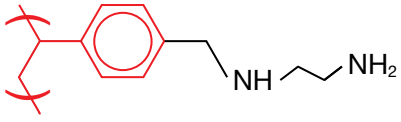
Weak Anion-Exchange



π-π Bonding



Hydrophobic Interaction



Strata-X-AW

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S038-TAK**	1 mL (100/box)
	30 mg	8B-S038-TBJ	3 mL (50/box)
	60 mg	8B-S038-UBJ	3 mL (50/box)
	100 mg	8B-S038-EBJ	3 mL (50/box)
	100 mg	8B-S038-ECH	6 mL (30/box)
	200 mg	8B-S038-FBJ	3 mL (50/box)
	200 mg	8B-S038-FCH	6 mL (30/box)
	500 mg	8B-S038-HBJ	3 mL (50/box)
	500 mg	8B-S038-HCH	6 mL (30/box)
Giga™ Tube			
	500 mg	8B-S038-HDG	12 mL (20/box)
	1 g	8B-S038-JDG	12 mL (20/box)
	1 g	8B-S038-JEG	20 mL (20/box)
	5 g	8B-S038-LFF	60 mL (16/box)
96-Well Plate			
	10 mg	8E-S038-AGB	2 Plates/Box
	30 mg	8E-S038-TGB	2 Plates/Box
	60 mg	8E-S038-UGB	2 Plates/Box
96-Well Microelution Plate			
	2 mg	8M-S038-4GA	ea

Strata-XL-AW

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S051-TAK	1 mL (100/box)
	60 mg	8B-S051-UBJ	3 mL (50/box)
	100 mg	8B-S051-EBJ	3 mL (50/box)
	100 mg	8B-S051-ECH	6 mL (30/box)
	200 mg	8B-S051-FBJ	3 mL (50/box)
	200 mg	8B-S051-FCH	6 mL (30/box)
	500 mg	8B-S051-HCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S051-KEG	20 mL (20/box)

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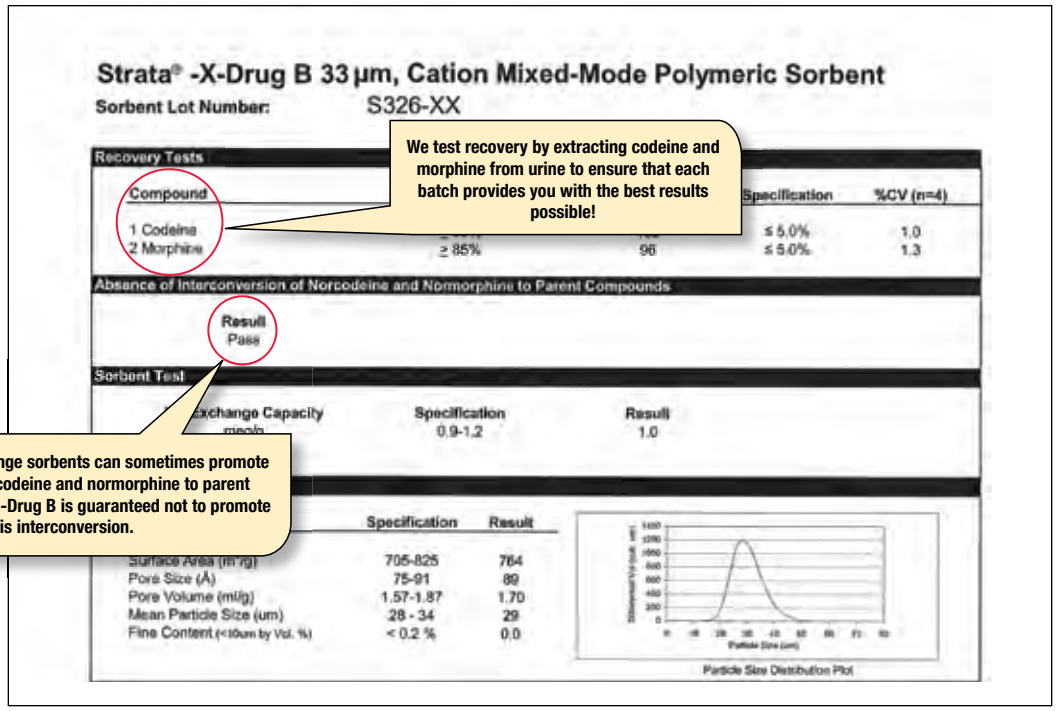
U.S. Patent No. 7,119,145

Strata-X-Drug B

A proprietary strong cation-exchange sorbent that is designed and quality controlled for basic drugs of abuse analysis. This sorbent does not require a conditioning/equilibrating step.

Strata-X-Drug B Certificate of Analysis



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	10 mg	8B-S128-AAK	1 mL (100/box)
	30 mg	8B-S128-TAK	1 mL (100/box)
	30 mg	8B-S128-TBJ	3 mL (50/box)
	60 mg	8B-S128-UBJ	3 mL (50/box)
	60 mg	8B-S128-UCH	6 mL (30/box)
	60 mg	8B-S128-UCL	6 mL (200/bag)
Giga™ Tube			
	100 mg	8B-S128-EDG	12 mL (20/box)
96-Well Plate			
	10 mg	8E-S128-AGB	2 Plates/box
	30 mg	8E-S128-TGB	2 Plates/box
	60 mg	8E-S128-UGB	2 Plates/box

Strata-X-Drug B Extraction Protocols

	1	2	3
	Opiates, 6-MAM, PCP, Amphetamines, Methadone, Healthcare Opiates, and Propoxyphene*	Marijuana Metabolites	Cocaine Metabolites
Condition	Not Required		
Load	Pre-treated sample	Pre-treated sample	Pre-treated sample
Wash 1	2 mL of 100 mM Sodium acetate buffer (pH 5.0)	2 mL of 100 mM Sodium acetate buffer (pH 5.0)	2 mL of 0.1 N Hydrochloric acid
Wash 2	2 mL Methanol	2 mL of Acetonitrile:100 mM Sodium acetate buffer (pH 5.0) (30:70)	2 mL Methanol
Dry	10 minutes under full vacuum	15 minutes under full vacuum	10 minutes under full vacuum
Elute	2 mL of Ethyl acetate: Isopropanol: Ammonium hydroxide (70:20:10)	2 mL of Ethyl acetate: Isopropanol (85:15)	2 mL of Ethyl acetate: Isopropanol: Ammonium hydroxide (70:20:10)

* Opiates, 6-MAM, PCP, Amphetamines, Methadone, Healthcare Opiates, and Propoxyphene can be extracted simultaneously or separately using the same SPE methodology.

Methods are written for 60 mg/6 mL Strata-X-Drug B; however they can be scaled to accommodate smaller or larger sample sizes and sorbent masses.

guarantee

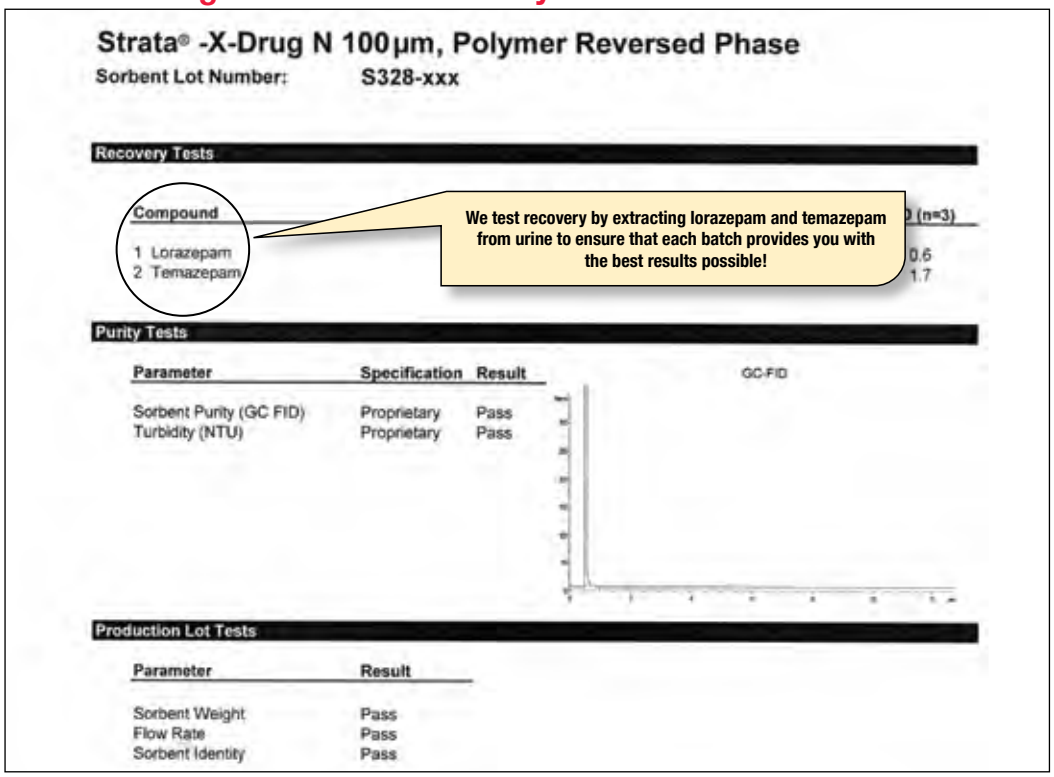
If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, return the product with comparative data within 45 days for a FULL REFUND.

U.S. Patent No. 7,119,145

Strata-X-Drug N

A proprietary reversed phase sorbent that is designed and quality controlled for neutral drugs of abuse analysis. This sorbent does not require a conditioning/equilibrating step.

Strata-X-Drug N Certificate of Analysis



Strata® -X-Drug N 100 µm, Polymer Reversed Phase

Sorbent Lot Number: S328-xxx

Recovery Tests

Compound	(n=3)
1 Lorazepam	0.6
2 Temazepam	1.7

We test recovery by extracting lorazepam and temazepam from urine to ensure that each batch provides you with the best results possible!

Purity Tests

Parameter	Specification	Result
Sorbent Purity (GC FID)	Proprietary	Pass
Turbidity (NTU)	Proprietary	Pass

GC-FID

Production Lot Tests

Parameter	Result
Sorbent Weight	Pass
Flow Rate	Pass
Sorbent Identity	Pass

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	30 mg	8B-S129-TAK	1 mL (100/box)
	30 mg	8B-S129-TBJ	3 mL (50/box)
	60 mg	8B-S129-UBJ	3 mL (50/box)
	60 mg	8B-S129-UCH	6 mL (30/box)
	60 mg	8B-S129-UCL	6 mL (200/bag)
	100 mg	8B-S129-ECH	6 mL (30/box)
96-Well Plate			
	10 mg	8E-S129-AGB	2 Plates/box
	30 mg	8E-S129-TGB	2 Plates/box

Strata-X-Drug N Extraction Protocols

	1	2
	Barbiturates	Benzodiazepines
Condition	Not Required	
Load	Pre-treated sample	Pre-treated sample
Wash 1	2 mL of 0.1 N Hydrochloric acid (HCl)	2 mL of Acetonitrile:Water (20:80)
Wash 2	2x 2 mL of Methanol: 0.1 N HCl (30:70)	—
Dry	10 minutes under full vacuum	10 minutes under full vacuum
Elute	2 mL of Ethyl acetate: Isopropanol (85:15)	2 mL of Ethyl acetate: Isopropanol (85:15)

Methods are written for 100 mg/6 mL Strata-X-Drug N; however they can be scaled to accomodate smaller or larger sample sizes and sorbent masses.

Strata Traditional Solid Phase Extraction (SPE) Sorbents

Material Characteristics

Phase	Particle Size (µm)	Pore Size (Å)	Surface Area (m^2/g)	Carbon Load (%)	Bonding	End Capping	Ionic Capacity (meq/g)
Reversed Phase							
C18-E	55	70	500	18.0	trifunctional	Yes	—
C18-U	55	70	500	17.0	trifunctional	No	—
C18-T	55	140	300	15.0	trifunctional	Yes	—
C8	55	70	500	10.5	trifunctional	Yes	—
Phenyl	55	70	500	10.5	trifunctional	Yes	—
Normal Phase							
CN	55	70	500	10.0	trifunctional	No	—
NH_2	55	70	500	5.0	trifunctional	No	1.3
Silica (Si-1)	55	65	550	0.0	—	—	—
Ion-Exchange							
SCX	55	70	500	9.0	trifunctional	No	0.9
WCX	55	70	500	8.0	trifunctional	No	0.8
SAX	55	70	500	6.5	trifunctional	No	0.9
Mixed-Mode							
Screen-C GF	200	70	500	proprietary	trifunctional	—	—
Screen-C	55	70	500	proprietary	trifunctional	—	—
Screen-A	55	70	500	proprietary	trifunctional	—	—
ABW	55	70	500	7.0	—	—	—
Specialty							
FL-PR (Florisil®)	170	80	300	0.0	—	—	—
EPH (Extractable Petroleum Hydrocarbon)	200	70	proprietary	0.0	—	—	—
AL-N (Alumina-Neutral)	120	120	150	—	—	—	—
SDB-L	100	260	500	—	—	—	—
Eco-Screen	proprietary	proprietary	proprietary	—	—	—	—
Melamine	proprietary	proprietary	proprietary	proprietary	—	—	—
PAH	proprietary	proprietary	proprietary	proprietary	—	—	—

Determine the Correct Sorbent Mass

Silica-Based Sorbents (Strata C18-E, C8, SCX, SAX, WCX, NH_2, etc.)	
Sample Matrix	**Sorbent Mass**
Blood, serum, plasma	50 mg sorbent per 250 µL
Urine	50 mg sorbent per 500 µL
Filtered tissue homogenates	100 mg sorbent per 100 mg tissue
Environmental Samples	**Sorbent Mass**
Water (particulate-free) drinking	500 mg/100 mL - 500 mL sample
Water (particulate-laden) rivers, runoff, etc.	1 g/100 mL - 500 mL sample
Soil Extracts	1 g/100 g of soil extract

Determine the Correct Sorbent Wash and Elution Volumes

strata™ Silica-Based Sorbent Mass	10 mg	50 mg	100 mg	150 mg	200 mg	500 mg	1 g	2 g	5 g	10 g
Practical Minimum Wash and Elution Volume 4 bed volumes	60 µL	300 µL	600 µL	900 µL	1.2 mL	3 mL	6 mL	12 mL	30 mL	60 mL
Recommended Wash and Elution Volume 8 bed volumes	120 µL	600 µL	1.2 mL	1.8 mL	2.4 mL	6 mL	12 mL	24 mL	60 mL	120 mL

Create a customized SPE method in under 1 minute.
www.phenomenex.com/mdtool

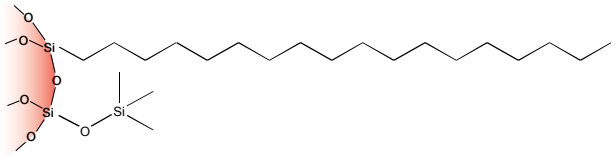
guarantee

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, return the product with comparative data within 45 days for a FULL REFUND.

Reversed Phase Sorbents

C18-E

End-capped C18 sorbent that offers strong hydrophobic retention with negligible secondary polar interactions from active silanol groups.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	50 mg	8B-S001-DAK	1 mL (100/box)
	100 mg	8B-S001-EAK**	1 mL (100/box)
	100 mg	8B-S001-EBJ	3 mL (50/box)
	200 mg	8B-S001-FBJ**	3 mL (50/box)
	200 mg	8B-S001-FCH	6 mL (30/box)
	500 mg	8B-S001-HBJ	3 mL (50/box)
	500 mg	8B-S001-HCH	6 mL (30/box)
	1 g	8B-S001-JEG	20 mL (20/box)
Giga™ Tube			
	500 mg	8B-S001-HDG	12 mL (20/box)
	2 g	8B-S001-KDG	12 mL (20/box)
	5 g	8B-S001-LEG	20 mL (20/box)
	10 g	8B-S001-MFF	60 mL (16/box)
	20 g	8B-S001-VFF	60 mL (16/box)
	50 g	8B-S001-YSN	150 mL (8/box)
	70 g	8B-S001-ZSN	150 mL (8/box)
96-Well Plate			
	25 mg	8E-S001-CGB	2 Plates/Box
	50 mg	8E-S001-DGB	2 Plates/Box
	100 mg	8E-S001-EGB	2 Plates/Box

On-line Extraction Cartridge

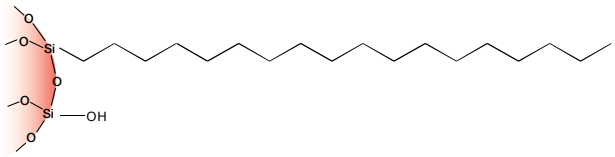
Description	Part Number	Unit/Box
Strata C18-E on-line extraction cartridge, 20 x 2.0 mm	00M-S039-B0-CB	ea
Cartridge holder, 20 mm	CH0-5845	ea

**Tab-less tubes available. Contact Phenomenex for details.

For Large Volume Cleanup/Flash Analysis, use Giga Tubes
For SPE Vacuum Manifolds and Accessories, see pp. 76-78

C18-U

C18 sorbent with no end-capping, giving the phase moderate hydrophobic selectivity with slight polar selectivity due to the active silanol groups.

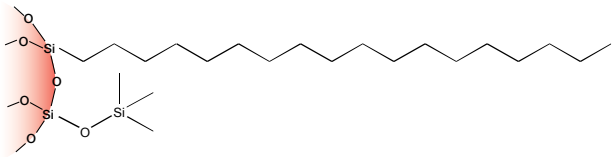


Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S002-EAK	1 mL (100/box)
	200 mg	8B-S002-FBJ	3 mL (50/box)
	500 mg	8B-S002-HBJ	3 mL (50/box)
	500 mg	8B-S002-HCH	6 mL (30/box)
	1 g	8B-S002-JCH	6 mL (30/box)
96-Well Plate			
	50 mg	8E-S002-DGB	2 Plates/Box
	100 mg	8E-S002-EGB	2 Plates/Box

C18-T

A wide-pore C18 sorbent that offers strong hydrophobic selectivity and accommodates molecules up to 75 kD in size.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S004-EAK	1 mL (100/box)
	200 mg	8B-S004-FBJ	3 mL (50/box)
	500 mg	8B-S004-HBJ	3 mL (50/box)
	500 mg	8B-S004-HCH	6 mL (30/box)
	1 g	8B-S004-JCH	6 mL (30/box)
96-Well Plate			
	50 mg	8E-S004-DGB	2 Plates/Box

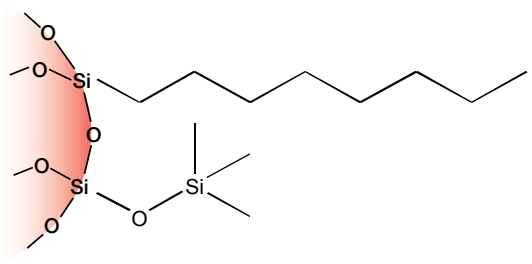
guarantee

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, return the product with comparative data within 45 days for a FULL REFUND.

Reversed Phase Sorbents

C8

An end-capped C8 sorbent that offers moderate hydrophobic retention with negligible secondary polar interactions from active silanol groups.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S005-EAK	1 mL (100/box)
	200 mg	8B-S005-FBJ	3 mL (50/box)
	500 mg	8B-S005-HBJ	3 mL (50/box)
	500 mg	8B-S005-HCH	6 mL (30/box)
	1 g	8B-S005-JCH	6 mL (30/box)
Giga™ Tube			
	2 g	8B-S005-KDG	12 mL (20/box)
	5 g	8B-S005-LEG	20 mL (20/box)
	10 g	8B-S005-MFF	60 mL (16/box)
96-Well Plate			
	25 mg	8E-S005-CGB	2 Plates/Box

On-line Extraction Cartridge

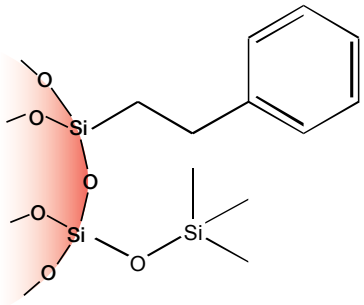
Description	Part Number	Unit/Box
Strata C8 on-line extraction cartridge, 20 x 2.0 mm	00M-S101-B0-CB	ea
Cartridge holder, 20 mm	CH0-5845	ea

For Large Volume Cleanup/Flash Analysis, use Giga Tubes
For SPE Vacuum Manifolds and Accessories, see pp. 76-78

Don't see the size or format you want? Contact Phenomenex or your local distributor for other dimensions, Giga tubes, and bulk sorbent pricing, and part numbers.

Phenyl

A short alkyl chain with a phenyl group provides moderate hydrophobic selectivity and aromatic selectivity through π-π interactions.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S006-EAK	1 mL (100/box)
	200 mg	8B-S006-FBJ	3 mL (50/box)
	500 mg	8B-S006-HBJ	3 mL (50/box)
	500 mg	8B-S006-HCH	6 mL (30/box)
	1 g	8B-S006-JCH	6 mL (30/box)
96-Well Plate			
	25 mg	8E-S006-CGB	2 Plates/Box
	100 mg	8E-S006-EGB	2 Plates/Box

guarantee

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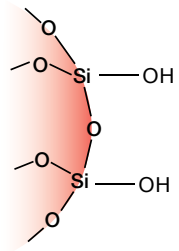
Normal Phase Sorbents

Silica (Si-1)

Unbonded silica particle that offers strong polar selectivity.

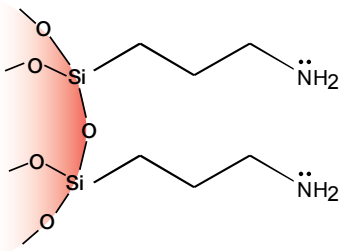


Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S012-EAK	1 mL (100/box)
	200 mg	8B-S012-FBJ	3 mL (50/box)
	500 mg	8B-S012-HBJ**	3 mL (50/box)
	500 mg	8B-S012-HCH**	6 mL (30/box)
	1 g	8B-S012-JCH**	6 mL (30/box)
Giga™ Tube			
	500 mg	8B-S012-HDG	12 mL (20/box)
	1 g	8B-S012-JDG	12 mL (20/box)
	2 g	8B-S012-KDG	12 mL (20/box)
	5 g	8B-S012-LEG	20 mL (20/box)
	10 g	8B-S012-MFF	60 mL (16/box)
	20 g	8B-S012-VFF	60 mL (16/box)
	50 g	8B-S012-YSN	150 mL (8/box)
	70 g	8B-S012-ZSN	150 mL (8/box)
96-Well Plate			
	50 mg	8E-S012-DGB	2 Plates/Box
	100 mg	8E-S012-EGB	2 Plates/Box

NH_2/WAX

This amino phase offers strong polar selectivity and hydrogen bonding under normal phase conditions or can be used as a weak anion-exchange sorbent.



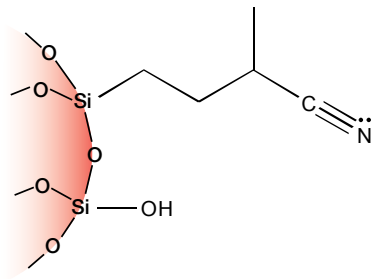
Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S009-EAK	1 mL (100/box)
	200 mg	8B-S009-FBJ	3 mL (50/box)
	500 mg	8B-S009-HBJ**	3 mL (50/box)
	500 mg	8B-S009-HCH	6 mL (30/box)
	1 g	8B-S009-JCH	6 mL (30/box)
Giga Tube			
	500 mg	8B-S009-HDG	12 mL (20/box)
	2 g	8B-S009-KDG	12 mL (20/box)
	5 g	8B-S009-LEG	20 mL (20/box)
	10 g	8B-S009-MFF	60 mL (16/box)
	20 g	8B-S009-VFF	60 mL (16/box)
96-Well Plate			
	25 mg	8E-S009-CGB	2 Plates/Box
	50 mg	8E-S009-DGB	2 Plates/Box
	100 mg	8E-S009-EGB	2 Plates/Box

**Tab-less tubes available. Contact Phenomenex for details.

Cyano (CN)

A polar phase with slight hydrophobic selectivity in reversed phase mode and moderate polar selectivity in normal phase mode.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S007-EAK	1 mL (100/box)
	200 mg	8B-S007-FBJ	3 mL (50/box)
	500 mg	8B-S007-HBJ	3 mL (50/box)
	500 mg	8B-S007-HCH	6 mL (30/box)
	1 g	8B-S007-JCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S007-KDG	12 mL (20/box)
96-Well Plate			
	50 mg	8E-S007-DGB	2 Plates/Box

guarantee

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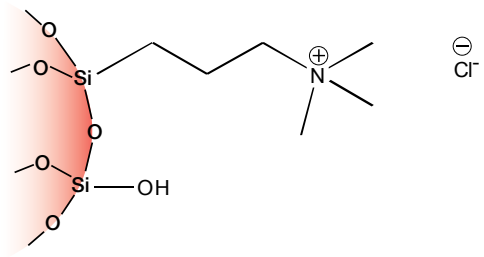
Ion-Exchange Sorbents

SAX (strong anion-exchange)

The quaternary amine phase remains positively charged under all conditions, giving a strong anion-exchange mechanism of retention.

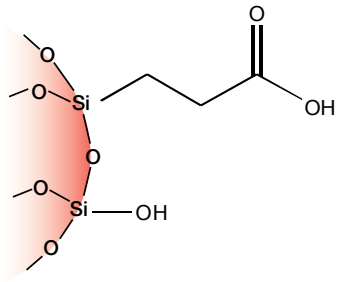


Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S008-EAK	1 mL (100/box)
	100 mg	8B-S008-EBJ	3 mL (50/box)
	200 mg	8B-S008-FBJ	3 mL (50/box)
	500 mg	8B-S008-HBJ	3 mL (50/box)
	500 mg	8B-S008-HCH	6 mL (30/box)
	1 g	8B-S008-JCH	6 mL (30/box)
Giga™ Tube			
	500 mg	8B-S008-HDG	12 mL (20/box)
	2 g	8B-S008-KDG	12 mL (20/box)
	5 g	8B-S008-LEG	20 mL (20/box)
	20 g	8B-S008-VFF	60 mL (16/box)
96-Well Plate			
	25 mg	8E-S008-CGB	2 Plates/Box
	50 mg	8E-S008-DGB	2 Plates/Box
	100 mg	8E-S008-EGB	2 Plates/Box

WCX (weak cation-exchange)

A carboxylic acid group is bonded to the surface of the silica particle, giving a weak cation-exchange selectivity.

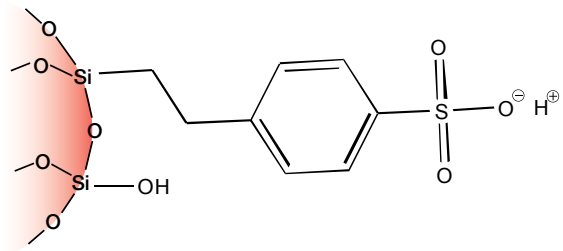


Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S027-EAK	1 mL (100/box)
	200 mg	8B-S027-FBJ	3 mL (50/box)
	500 mg	8B-S027-HBJ	3 mL (50/box)
	500 mg	8B-S027-HCH	6 mL (30/box)
	1 g	8B-S027-JCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S027-KDG	12 mL (20/box)
	5 g	8B-S027-LEG	20 mL (20/box)
96-Well Plate			
	25 mg	8E-S027-CGB	2 Plates/Box
	50 mg	8E-S027-DGB	2 Plates/Box

SCX (strong cation-exchange)

A benzene sulfonic acid group is bonded to the surface of the silica particle, giving strong cation-exchange selectivity.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S010-EAK	1 mL (100/box)
	100 mg	8B-S010-EBJ	3 mL (50/box)
	200 mg	8B-S010-FBJ	3 mL (50/box)
	500 mg	8B-S010-HBJ	3 mL (50/box)
	500 mg	8B-S010-HCH	6 mL (30/box)
	1 g	8B-S010-JCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S010-KDG	12 mL (20/box)
	5 g	8B-S010-LEG	20 mL (20/box)
	10 g	8B-S010-MFF	60 mL (16/box)
	20 g	8B-S010-VFF	60 mL (16/box)
96-Well Plate			
	25 mg	8E-S010-CGB	2 Plates/Box
	50 mg	8E-S010-DGB	2 Plates/Box
	100 mg	8E-S010-EGB	2 Plates/Box

guarantee

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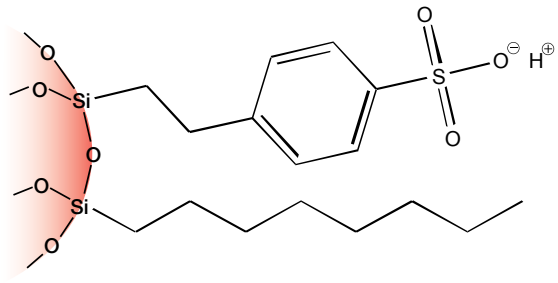
Mixed-Mode Sorbents

Screen-C

Incorporates the hydrophobic selectivity of a C8 phase and strong cation-exchange for the extraction of basic drugs from biological matrixes.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S016-EAK**	1 mL (100/box)
	100 mg	8B-S016-EBJ	3 mL (50/box)
	150 mg	8B-S016-SBJ	3 mL (50/box)
	150 mg	8B-S016-SCH	6 mL (30/box)
	200 mg	8B-S016-FBJ	3 mL (50/box)
	200 mg	8B-S016-FCH	6 mL (30/box)
	300 mg	8B-S016-RBJ	3 mL (50/box)
	300 mg	8B-S016-RCH	6 mL (30/box)
	500 mg	8B-S016-HCH	6 mL (30/box)
96-Well Plate			
	50 mg	8E-S016-DGB	2 Plates/Box

Screen-C GF

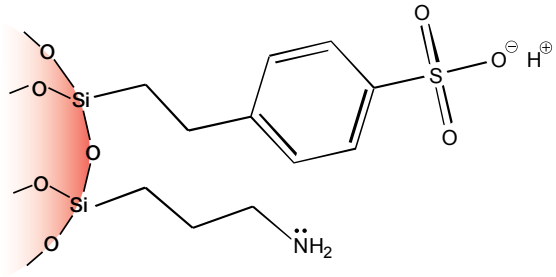
Offers the selectivity of Screen-C in a gravity flow particle size for viscous samples.

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	500 mg	8B-S026-HBJ	3 mL (50/box)

ABW

Offers a strong cation-exchange group and a weak anion-exchange group for the extraction or fractionation of complex mixtures.

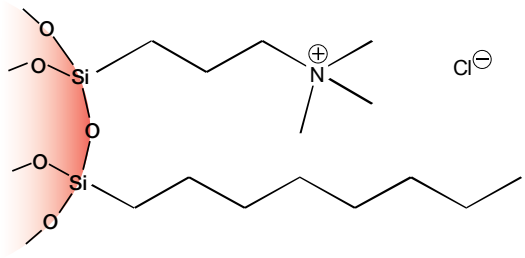


Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	200 mg	8B-S030-FBJ	3 mL (50/box)
	1 g	8B-S030-JCH	6 mL (30/box)
Giga Tube			
	2 g	8B-S030-KDG	12 mL (20/box)
	5 g	8B-S030-LEG	20 mL (20/box)

Screen-A

Incorporates the hydrophobic selectivity of a C8 phase and strong anion-exchange for the extraction of acidic drugs from biological matrixes.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S019-EAK	1 mL (100/box)
	200 mg	8B-S019-FBJ	3 mL (50/box)
	200 mg	8B-S019-FCH	6 mL (30/box)
	500 mg	8B-S019-HCH	6 mL (30/box)

**Tab-less tubes available. Contact Phenomenex for details.

guarantee

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, return the product with comparative data within 45 days for a FULL REFUND.

Specialty Sorbents

Alumina-N (AL-N)

A polar phase that allows for the extraction of polar compounds from food and environmental samples.

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	500 mg	8B-S313-HBJ	3 mL (50/box)
	1 g	8B-S313-JCH	6 mL (30/box)
Giga™ Tube			
	2 g	8B-S313-KDG	12 mL (20/box)

Florisil® (FL-PR, pesticide residue grade)

A modified silica sorbent that contains a magnesium ion, allowing for the retention of polar and halogenated compounds, like pesticides, from environmental samples.

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	500 mg	8B-S013-HBJ	3 mL (50/box)
	500 mg	8B-S013-HCH	6 mL (30/box)
	1 g	8B-S013-JCH**	6 mL (30/box)
Giga Tube			
	1 g	8B-S013-JEG	20 mL (20/box)
	2 g	8B-S013-KDG	12 mL (20/box)
	5 g	8B-S013-LEG	20 mL (20/box)
	10 g	8B-S013-MFF	60 mL (16/box)

**Tab-less tubes available. Contact Phenomenex for details.

Eco-Screen

This proprietary normal phase sorbent is topped with sodium sulfate to remove any excess water and used for the extraction of hydrocarbons from environmental samples, resulting in high recoveries of naphthalene.

Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
Tube				
	1 g	8B-S046-JBJ	3 mL (50/box)	

Melamine

A proprietary phase that allows for the simultaneous extraction of melamine and cyanuric acid out of food and biological samples.

Ordering Information

Format	Sorbent Mass	Part Number	Unit	Price
Tube				
	100 mg	8B-S049-EBJ	3 mL (50/box)	
	200 mg	8B-S049-FBJ	3 mL (50/box)	

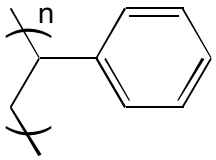
guarantee

If Strata SPE products do not perform as well or better than your current SPE product of similar phase, mass and size, return the product with comparative data within 45 days for a FULL REFUND.

Specialty Sorbents

SDB-L (styrene-divinylbenzene)

A rugged polymer sorbent that is pH stable from 1-14 and offers hydrophobic and aromatic selectivity for reversed phase applications.

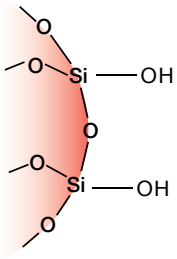


Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	100 mg	8B-S014-EAK	1 mL (100/box)
	200 mg	8B-S014-FBJ	3 mL (50/box)
	200 mg	8B-S014-FCH	6 mL (30/box)
	500 mg	8B-S014-HBJ	3 mL (50/box)
	500 mg	8B-S014-HCH	6 mL (30/box)
	1 g	8B-S014-JCH	6 mL (30/box)
Giga™ Tube			
	10 g	8B-S014-MFF	60 mL (16/box)
96-Well Plate			
	50 mg	8E-S014-DGB	2 Plates/Box

EPH (Extractable Petroleum Hydrocarbons)

This specialty normal phase sorbent was developed for the fractionation of aliphatic and aromatic hydrocarbons from environmental samples.



Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	500 mg	8B-S031-HBJ	3 mL (50/box)
Giga Tube			
	5 g	8B-S031-LEG	20 mL (20/box)
Teflon® Giga Tube			
	5 g	8B-S031-LEG-T	20 mL (20/box)

PAH (Polycyclic Aromatic Hydrocarbons)

This proprietary sorbent was designed to provide high recoveries of polycyclic aromatic hydrocarbons from water (as specified in EPA Method 550.1) while simultaneously removing humic acids from the extract.

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	750 mg	8B-S130-WCH	6 mL (30/box)
	1.5 g	8B-S130-7CH	6 mL (30/box)

Sodium Sulfate

A specialized sorbent that is used for the removal of aqueous residues from organic solutions in an effort to reduce blow-down time.

Ordering Information

Format	Sorbent Mass	Part Number	Unit
Tube			
	1 g	8B-S124-JCH	6 mL (30/box)
Giga Tube			
	5 g	8B-S124-LEG	20 mL (20/box)

Don't see the size or format you want? Contact Phenomenex or your local distributor for other dimensions, Giga tubes, and bulk sorbent pricing and part numbers.

The Newest Solution To Increased Productivity

Presston 100 is a positive pressure manifold designed to make sample preparation processing easy and consistent. It applies pressure from above to push liquid through sample preparation sorbents to **provide uniform flow rates when processing samples.**

Utilizing a single manifold, 96-well plates, 1 mL, 3 mL, and 6 mL tubes can be used with a simple adapter kit.

Ordering Information

Presston 100 Positive Pressure Manifold

Part No.	Description
AH0-9334	Presston 100 Positive Pressure Manifold, 96-Well Plate
AH0-9342	Presston 100 Positive Pressure Manifold, 1 mL Tube Complete Assembly
AH0-9347	Presston 100 Positive Pressure Manifold, 3 mL Tube Complete Assembly
AH0-9343	Presston 100 Positive Pressure Manifold, 6 mL Tube Complete Assembly

See Presston in Action

Watch the demonstration video and see how easy it is to process samples!

www.phenomenex.com/Presston

Find the right sample preparation solution. Use our simple selection chart on p. 48

The Presston 100 96-Well Positive Pressure Manifold can also process 1, 3, and 6 mL tubes using the following adapter kits

Ordering Information

Presston 100 Tube Adapter Kits (for AH0-9334)

Part No.	Description
AH0-9344	1 mL Tube Adapter Kit
AH0-9345	3 mL Tube Adapter Kit
AH0-9346	6 mL Tube Adapter Kit

Sleek, Low Profile Design
Width: 13", Depth: 13.25", Height: 17" (open), 13.5" (closed)

Safely Process Samples
Protect operators from solvents

Never Lose Pressure
Always maintain a tight seal between the manifold and tubes/96-well plate

Determine Your Operating Pressure
Easily read your operating pressure with the easy to view pressure gauge

Easily Load Samples
Moveable locator plate makes sample loading and cleaning easy

Phenomenex warrants that for a period of 12 months following delivery, the Presston 100 Positive Pressure Manifold you have purchased will perform in accordance with the published specifications and will be free from defects in materials or workmanship. In the event that the Presston 100 Positive Pressure Manifold does not meet this warranty, Phenomenex will repair or replace defective parts. **Please visit www.phenomenex.com/Presston for complete warranty information.**

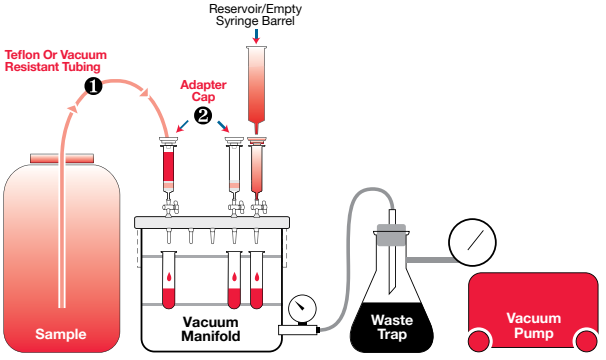
Vacuum Manifolds for Processing Samples

Sample Processing Guidelines for Strata-X Sorbents

Vacuum Manifolds for Tubes

- Maximize throughput with simple, cost effective batch processing of up to 96 samples per hour. (24 samples per 15 minutes)
- Fits 13 mm and 16 mm test tubes up to 125 mm in height.
- "Slow is Safe" for loading and elution. A flow rate of 1 – 3 drops per second (1 – 3 mL /min) is recommended during the loading and elution steps for typical small volume samples (< 5 mL). At these critical steps the analytes are chemically interacting with the sorbent.
- Large volume samples (> 100 mL) in large cartridges (>1 gram) may be processed at flow rates between 5 – 10 mL/minute.
- Conditioning and Wash steps are generally not flow critical.
- Flow rate is easily adjusted via master vacuum controller or individual stopcocks if necessary.
- Individual stopcocks are typically not needed when using the Strata-X family of sorbents (Strata-X, X-C, X-CW, X-A, X-AW, XL, XL-C, XL-CW, XL-A, XL-AW). They are very forgiving of improper flow rates and are truly resistant to deconditioning effects caused by excessive drying during the method.
- Reversed phase methods are more forgiving of fast flow rates than ion-exchange or normal phase.

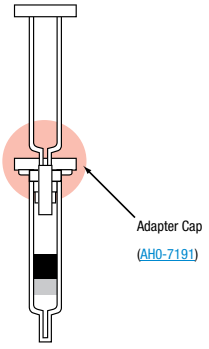
Processing Large Sample Volumes



Description	Part No.
❶ Teflon or Vacuum Resistant Tubing (⅛ inch O.D.)	AT0-2956
❷ Adapter Cap	AH0-7191

Have Large Sample Volume but Need a Small Bed Mass?

Use an adapter cap to attach another SPE tube, which can be used to increase the reservoir size for washing or eluting solvents.

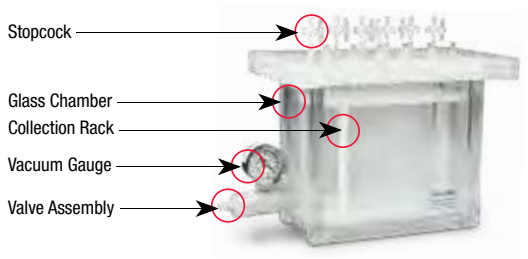


Explore our vast collection of technical resources by technique, industry, and more! Search to find your perfect solution.
www.phenomenex.com/MyLinks

Vacuum Manifolds

SPE Tube Vacuum Manifold

- **Process up to 12 or 24 samples at one time**
- **Process up to 10 large volume samples at one time**
- **Female Luer inlets fit all male Luer tipped SPE tubes and cartridges**



Ordering Information

Part No.	Description	Unit
24 – Position Vacuum Manifold*[3]		
AH0-6024	SPE 24-Position Vacuum Manifold Set, complete assembly	ea
24 – Position Vacuum Manifold Replacement Parts		
AH0-6026	SPE Glass Chamber	ea
AH0-6028	SPE Cover, Gasket and 24 Stopcocks	ea
AH0-6030	SPE Gaskets	2/pk
AH0-6038	SPE Collection Rack Assembly, including plates, legs and clips[3]	ea
AH0-6049	SPE Luer Stopcocks	24/pk
12 – Position Vacuum Manifold*[2]		
AH0-6023	SPE 12-Position Vacuum Manifold Set, complete assembly	ea
12 – Position Vacuum Manifold Replacement Parts		
AH0-6025	SPE 12-Position Glass Chamber	ea
AH0-6027	SPE Cover, Gasket and 12 Stopcocks	ea
AH0-6029	SPE Gaskets	2/pk
AH0-6037	SPE Collection Rack Assembly, including plates, legs and clips[2]	ea
AH0-6052	SPE 12-Position Vacuum Waste Container, polypropylene	10/pk
AH0-6049	SPE Luer Stopcocks	24/pk
10 - Position Tall-Boy™ Vacuum Manifold*[1]		
AH0-7502	SPE 10-Position Tall-Boy Vacuum Manifold, complete assembly	ea
10 – Position Tall-Boy™ Vacuum Manifold Replacement Parts		
AH0-7503	SPE 10-Position Tall-Boy Vacuum Manifold, Glass Chamber	ea
AH0-7504	SPE 10-Position Tall-Boy Vacuum Manifold, Cover, Gasket and 10 Stopcocks	ea
AH0-6049	SPE Luer Stopcocks	24/pk

96-Well Plate Vacuum Manifold

- **Includes vacuum valve attachment and two collection plate spacer inserts**
- **Made of durable acrylic**
- **Designed to accommodate 96-well plates, collection plates, protein precipitation plates, and filtration plates**

Ordering Information

Part No.	Description	Unit
96-Well Plate Manifold**		
AH0-8950	96-Well Plate Manifold, Universal w/vacuum gauge	ea
Replacement Parts		
AH0-7285	96-Well Plate Manifold Replacement Gasket, Flat (to fit between acrylic chamber and 96-well plate), black	ea
AH0-7198	96-Well Plate Manifold Replacement Gasket, Profile, (to fit between acrylic chamber and manifold base), white	ea
AH0-8637	Reservoir, Single Well, High Profile, 96 Bottom Troughs	25/pk

**Manifold, compatible with 2 mL Impact plate, Novum SLE 96-well plate, Phree Phospholipid Removal plate, Strata, and Strata-X 96-well plate formats.

For additional manifold replacement parts and accessories, see p. 78

* Manifolds include: Vacuum-tight glass chamber, vacuum gauge assembly, polypropylene lid with gasket, male and female luers and yellow end plugs, stopcock valves, collection rack assemblies, polypropylene needles, lid support legs. Waste container included with 12-position manifold.

(1) The 10-position Tall Boy Vacuum Manifold Collection Rack includes 4 plates: one base plate, one dimple plate, one small plate and one large plate and three riser bar legs, along with 12 manifold clips to support the plates. The assembly also includes 10 polypropylene needles, 10 stopcocks and 4 black legs to support the lid when taken off the glass block.

(2) The 12-position Collection Rack Assembly consists of 3 support legs, base plate, dimple plate, small plate, medium plate, large plate, volumetric plate, and 12 retaining clips.

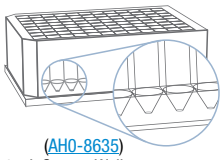
(3) The 24-position Collection Rack Assembly consists of 3 support legs, base plate, dimple plate, small plate, large plate, and 12 retaining clips.

Sample Preparation Accessories

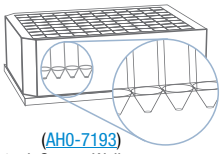
Collection Plates

- Available in conical V- and round-bottom formats
- Made of chemically inert polypropylene
- Available in 350 µL, 1 and 2 mL volumes

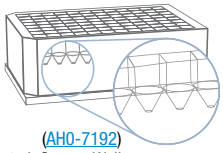
Conical V- and round-bottom for maximized sample delivery



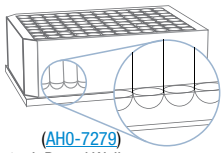
(AH0-8635)
2 mL Square Well



(AH0-7193)
1 mL Square Well



(AH0-7192)
350 µL Square Well



(AH0-7279)
1 mL Round Well

Ordering Information

Collection Plates*

Part No.	Description	Unit
AH0-7192	350 µL/well 96-Square Well Conical V-bottom Collection Plate	50/pk
AH0-7193	1 mL/well 96-Square Well Conical V-bottom Collection Plate	50/pk
AH0-7279	1 mL/well 96-Round Well Round Bottom 7 mm Collection Plate	50/pk
AH0-7194	2 mL/well 96-Square Well Conical V-bottom Collection Plate	50/pk
AH0-8635	2 mL/well 96-Square Well Round-Conical Bottom Collection Plate	50/pk
AH0-8636	2 mL/well 96-Round Well Round Bottom 8 mm Collection Plate	50/pk

Vacuum Manifold Accessories

Ordering Information

General Vacuum Manifold Accessories

Part No.	Description	Unit
AH0-7191	Adapter Caps for 1, 3 and 6 mL SPE tubes, polyethylene, with Luer tip	15/pk
AH0-7379	Adapter Caps for 12, 20, and 60 mL SPE tubes, polyethylene, with Luer tip	6/pk
AH0-8278	Strata Syringe and Adapter Kit	ea
AH0-6034	SPE Manifold Needles, polypropylene	24/pk
AH0-6035	SPE Manifold Needles, stainless steel	12/pk
AH0-6050	SPE Drying Attachment for 12-position manifold	ea
AH0-6051	SPE Drying Attachment for 24-position manifold	ea
AH0-6053	Female Luer Fittings	2/pk
AH0-6054	Male Luer Fittings	2/pk
AH0-6057	Vacuum Gauge and Valve Assembly	ea
AH0-6064	Teflon® Needles	100/pk
AH0-6065	Teflon® Needles	500/pk

Filtration Plate

- Available in 0.7 µm membrane porosity
- Inert surface eliminates non-specific binding for maximized results
- Cost effective solution to meet all filtration goals

Ordering Information

Filtration Plates

Part No.	Description	Unit/Box
AF0-8300	0.7 µm Glass Fiber 96-Well Filtration Plate	2

Sealing Mats and Tape

- Fits all Phenomenex 96-well plates, square-well collection plates, round-well collection plates, protein precipitation plates, and filtration plates
- Pierceable and Pre-Slit available

(AH0-7195)

Ordering Information

Sealing Mats*

Part No.	Description	Unit
AH0-8597	Sealing Mats, Pierceable, 96-Square Well, Silicone	50/pk
AH0-8598	Sealing Mats, Pre-Slit, 96-Square Well, Silicone	50/pk
AH0-8631***	Sealing Mats, Pierceable, 96-Round Well 7 mm, Silicone	50/pk
AH0-8632***	Sealing Mats, Pre-Slit, 96-Round Well 7 mm, Silicone	50/pk
AH0-8633**	Sealing Mats, Pierceable, 96-Round Well 8 mm, Silicone	50/pk
AH0-8634**	Sealing Mats, Pre-Slit, 96-Round Well 8 mm, Silicone	50/pk
AH0-8199	Sealing Mats, Pierceable, 96 Square Well, Santoprene™	100/pk
AH0-7195	Sealing Mats, Pierceable, 96-Square Well, Ethylene Vinyl Acetate (EVA)	50/pk
AH0-7362	Sealing Tape Pad	10/pk

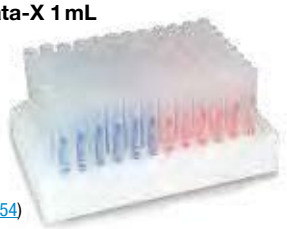
*Square well sealing mats compatible with 2 mL Impact plates, Novum SLE 96-well plate, Phree Phospholipid Removal plate, Strata and Strata-X 96-well plates, and 96 square well collection plates.

**8 mm round-well sealing mats compatible with 2 mL round-well 8 mm collection plates (AH0-8636)

***7 mm round-well sealing mats compatible with1 mL round-well 7 mm collection plates (AH0-7279)

96-Well Tab-less Tube Holders

- Easily process partial plates
- Arrange multiple SPE sorbents in one plate
- Easily replace a single SPE tube
- Compatible with Strata® and Strata-X 1 mL tab-less SPE tubes



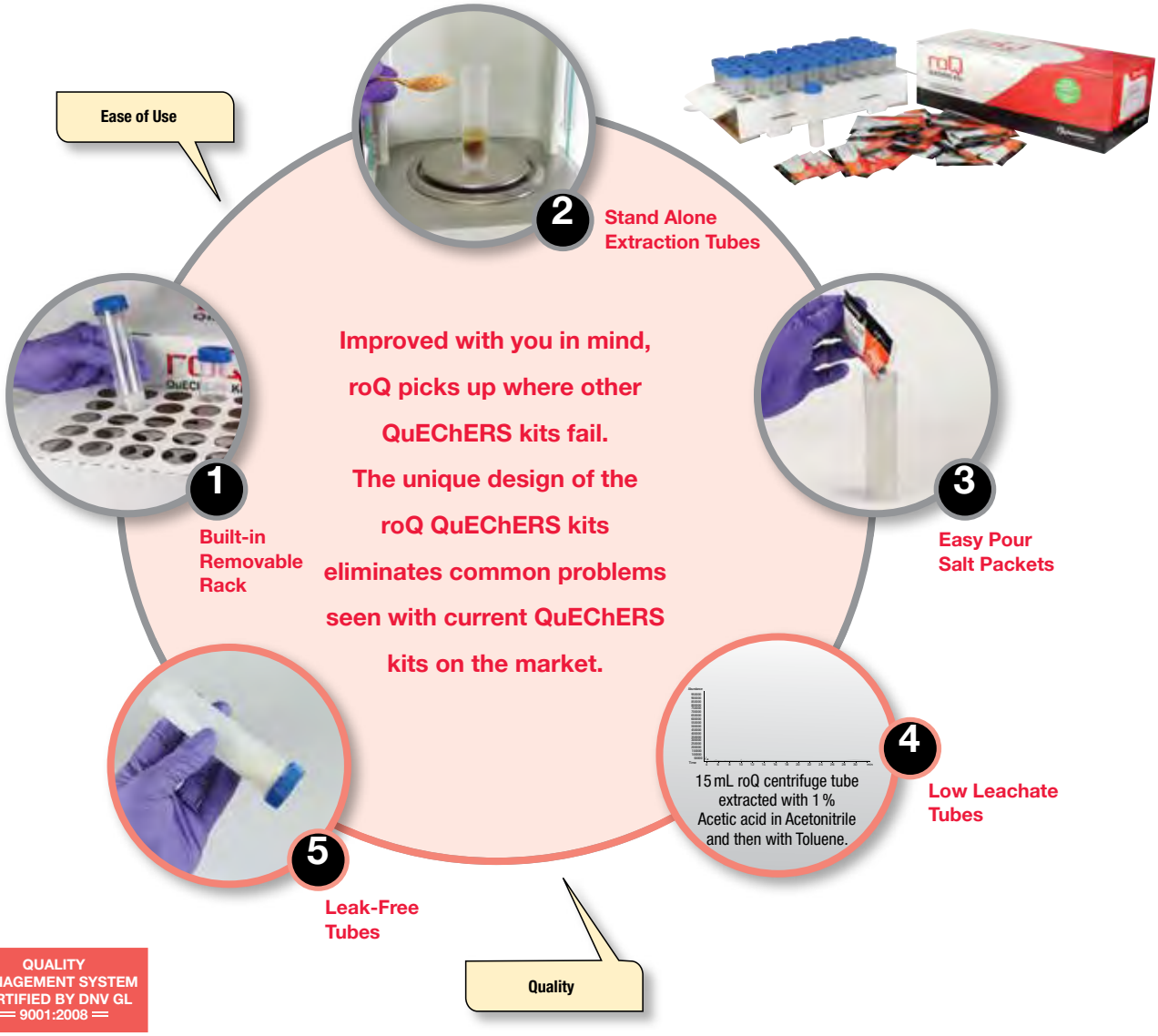
(AH0-9054)

Ordering Information

96-Well Tab-less Tube Holders

Part No.	Description	Unit
AH0-9054	96-Well 1 mL Tab-less Tube Holder for use with the 96-Well plate vacuum manifold (AH0-8950)	ea
AH0-9055	96-Well 1 mL Tab-less Tube Holder for use with positive pressure manifolds	ea

Why Choose roQ QuEChERS?



QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV GL = 9001:2008 =

- **Validates processes to be fully established, functional, and meet international standards**
- **MSDS and Certificate of Analysis (CoA) available for all kits**
- **roQ QuEChERS kits are guaranteed for quality**

Technical Support

Sample Preparation Support at Your Fingertips

- Dedicated sample preparation team available to assist your method development needs
- Expertise in sample preparation and solid phase extraction
- Access to up-to-date sample preparation applications

Free Method Development Services

- Let our specialists help you with new method development, method optimization, and validation, including FDA compliant and GMP compliant validation.

For more details on roQ QuEChERS Kits:
www.phenomenex.com/roQ

Select Your roQ QuEChERS Kit (Quick - Easy - Cheap - Effective - Rugged - Safe)

Step 1

Extraction*

QuEChERS can be performed by following 3 different methods: The AOAC 2007.01 Method, the EN 15662 Method, or the Original Non-Buffered Method.

Select Your roQ Extraction Kit

AOAC 2007.01 Method	Original Non-Buffered Method	EN 15662 Method
6.0 g $MgSO_4$,1.5 g NaOAc KS0-8911	4.0 g $MgSO_4$, 1.0 g NaCl KS0-8910 6.0 g $MgSO_4$, 1.5 g NaCl KS0-8912	4.0 g $MgSO_4$, 1.0 g NaCl, 1.0 g SCTD, 0.5 g SCDS KS0-8909

Step 2

Clean Up/dSPE**

	AOAC 2007.01		EN 15662	
	1 mL	8 mL	1 mL	6 mL
General 	150 mg $MgSO_4$ 50 mg PSA KS0-8920	1200 mg $MgSO_4$ 400 mg PSA KS0-8928	150 mg $MgSO_4$ 25 mg PSA KS0-8916	900 mg $MgSO_4$ 150 mg PSA KS0-8924
Fats and Waxes 	150 mg $MgSO_4$ 50 mg PSA 50 mg C18E KS0-8918	1200 mg $MgSO_4$ 400 mg PSA 400 mg C18E KS0-8926	150 mg $MgSO_4$ 25 mg PSA 25 mg C18E KS0-8913	900 mg $MgSO_4$ 150 mg PSA 150 mg C18E KS0-8921
Pigmented 	150 mg $MgSO_4$ 50 mg PSA 50 mg GCB KS0-8919	1200 mg $MgSO_4$ 400 mg PSA 400 mg GCB KS0-8927	150 mg $MgSO_4$ 25 mg PSA 2.5 mg GCB KS0-8914	900 mg $MgSO_4$ 150 mg PSA 15 mg GCB KS0-8922
Highly Pigmented 	–	–	150 mg $MgSO_4$ 25 mg PSA 7.5 mg GCB KS0-8915	900 mg $MgSO_4$ 150 mg PSA 45 mg GCB KS0-8923
Pigments and Fats 	150 mg $MgSO_4$ 50 mg PSA 50 mg GCB 50 mg C18E KS0-8917	1200 mg $MgSO_4$ 400 mg PSA 400 mg GCB 400 mg C18E KS0-8925	–	—

*All roQ Extraction kits contain fifty easy-pour salt packets and fifty 50 mL stand-alone centrifuge tubes.

**All roQ dSPE kits contain pre-weighed sorbents/salts inside 2 mL or 15 mL centrifuge tubes.

Salts and Sorbents used in roQ Kits

Extraction:

- Magnesium Sulfate ($MgSO_4$)
- Sodium Acetate (NaOAc)
- Sodium Chloride (NaCl)
- Sodium Citrate Tribasic Dihydrate (SCTD)
- Sodium Citrate Dibasic Sesquihydrate (SCDS)

Clean Up/dSPE:

- Magnesium Sulfate ($MgSO_4$)
- Primary/Secondary Amine (PSA)
- Endcapped C18 Sorbent (C18E)
- Graphitized Carbon Black (GCB)

roQ™ An Easier QuEChERS Solution

guarantee

If roQ QuEChERS Kits do not perform as well or better than your current QuEChERS product, return the product with comparative data within 45 days for a FULL REFUND.

roQ™ Extraction Kits

Extraction kits contain fifty easy-pour salt packets and fifty 50 mL stand-alone centrifuge tubes

Ordering Information

Description	Unit	Part No.
AOAC 2007.01 Method Extraction Kits		
6.0 g $MgSO_4$, 1.5 g NaOAc	50/pk	KS0-8911*
EN 15662 Method Extraction Kits		
4.0 g $MgSO_4$, 1.0 g NaCl, 1.0 g SCTD, 0.5 g SCDS	50/pk	KS0-8909*
Original Non-Buffered Method Extraction Kits		
4.0 g $MgSO_4$, 1.0 g NaCl	50/pk	KS0-8910
6.0 g $MgSO_4$, 1.5 g NaCl	50/pk	KS0-8912

*AOAC and EN Extraction Kits also available in traditional non-collared 50 mL centrifuge tubes, Part No.: KS0-8911-NC and KS0-8909-NC

roQ dSPE Kits

dSPE kits contain pre-weighed sorbents/salts inside 2 mL or 15 mL centrifuge tubes

Ordering Information

Description	Unit	Part No.
2 mL dSPE Kits		
150 mg $MgSO_4$, 25 mg PSA, 25 mg C18E	100/pk	KS0-8913
150 mg $MgSO_4$, 25 mg PSA, 2.5 mg GCB	100/pk	KS0-8914
150 mg $MgSO_4$, 25 mg PSA, 7.5 mg GCB	100/pk	KS0-8915
150 mg $MgSO_4$, 25 mg PSA	100/pk	KS0-8916
150 mg $MgSO_4$, 50 mg PSA, 50 mg C18E, 50 mg GCB	100/pk	KS0-8917
150 mg $MgSO_4$, 50 mg PSA, 50 mg C18E	100/pk	KS0-8918
150 mg $MgSO_4$, 50 mg PSA, 50 mg GCB	100/pk	KS0-8919
150 mg $MgSO_4$, 50 mg PSA	100/pk	KS0-8920
15 mL dSPE Kits		
900 mg $MgSO_4$, 150 mg PSA, 150 mg C18E	50/pk	KS0-8921
900 mg $MgSO_4$, 150 mg PSA, 15 mg GCB	50/pk	KS0-8922
900 mg $MgSO_4$, 150 mg PSA, 45 mg GCB	50/pk	KS0-8923
900 mg $MgSO_4$, 150 mg PSA	50/pk	KS0-8924
1200 mg $MgSO_4$, 400 mg PSA, 400 mg C18E, 400 mg GCB	50/pk	KS0-8925
1200 mg $MgSO_4$, 400 mg PSA, 400 mg C18E	50/pk	KS0-8926
1200 mg $MgSO_4$, 400 mg PSA, 400 mg GCB	50/pk	KS0-8927
1200 mg $MgSO_4$, 400 mg PSA	50/pk	KS0-8928

roQ Extraction Salt Packets

Salt packets only. Centrifuge tubes not included.

Ordering Information

Description	Unit	Part No.
AOAC 2007.01 Method Extraction Packets		
6.0 g $MgSO_4$, 1.5 g NaOAc	50/pk	AH0-9043
EN 15662 Method Extraction Packets		
4.0 g $MgSO_4$, 1.0 g NaCl, 1.0 g SCTD, 0.5 g SCDS	50/pk	AH0-9041
Original Non-Buffered Method Extraction Packets		
4.0 g $MgSO_4$, 1.0 g NaCl	50/pk	AH0-9042
6.0 g $MgSO_4$, 1.5 g NaCl	50/pk	AH0-9044

Bulk roQ QuEChERS Sorbents

Ordering Information

Phase	10 g	100 g
C18-E	—	04G-4348
GCB (Graphitized Carbon Black)	04D-4615	04G-4615
PSA	—	04G-4610

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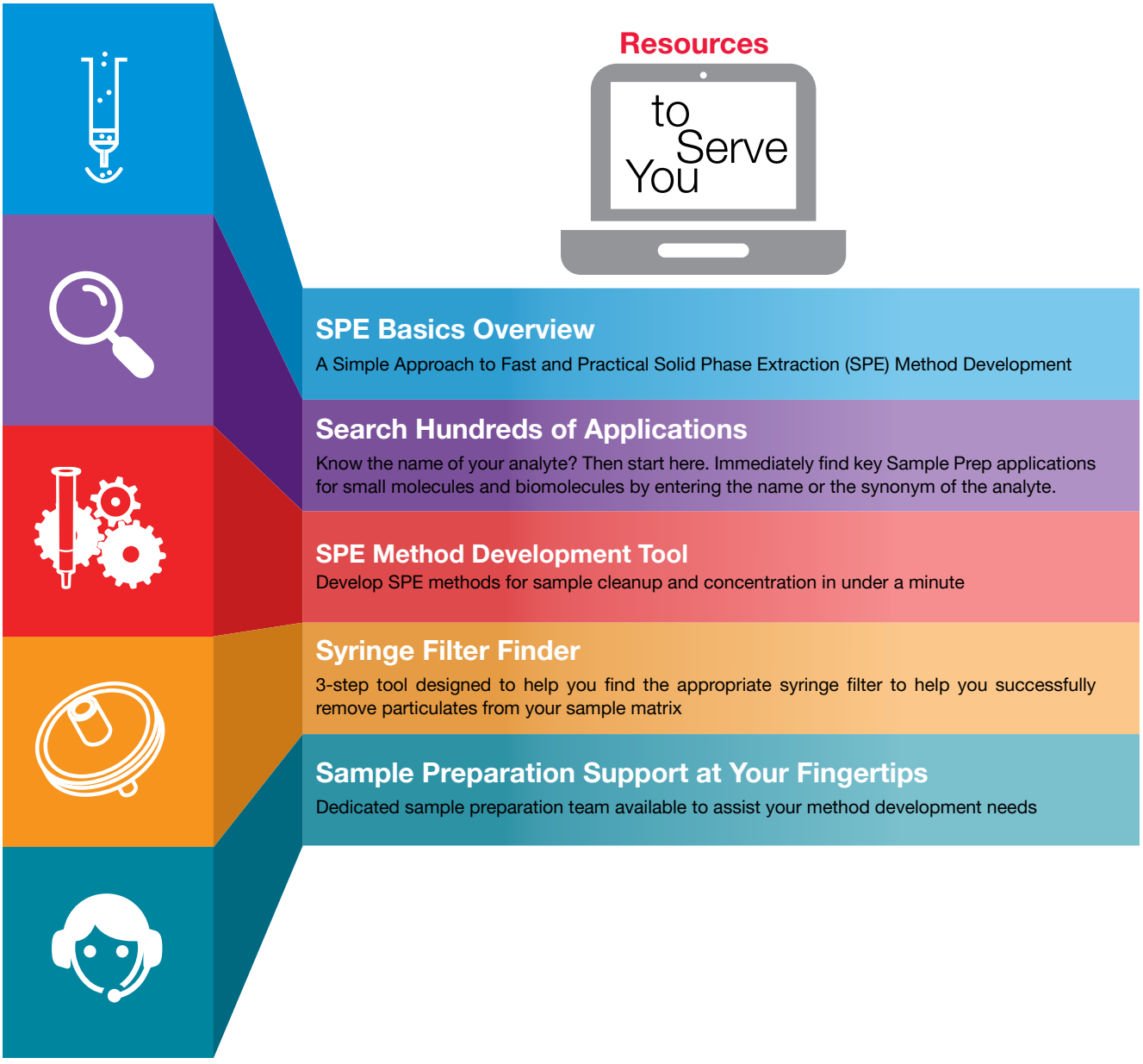
Sample Preparation Resources



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