

Still Using SPE for Bioanalysis?

There's an **Easier, Better** Way.



Improve Your
LC/MS Analysis with
Phree Phospholipid Removal Solutions

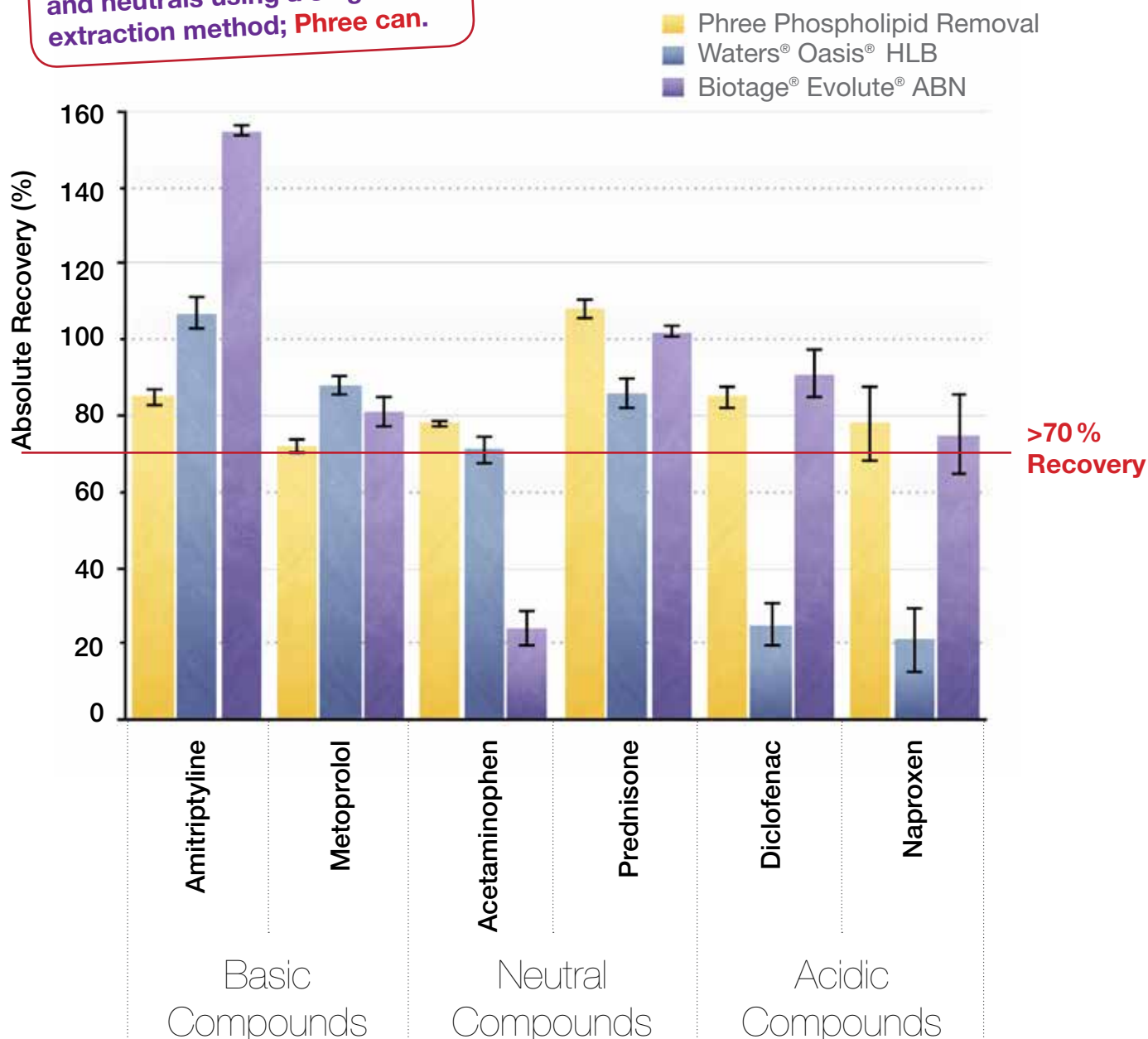
- Double Your Productivity
- Skip the Method Development
- Achieve Clean Samples

Skip the Method Development Without Compromising Recovery

SPE requires multiple methods to achieve acceptable recoveries for acids, bases, and neutrals. With Phree™ Phospholipid Removal products, one method is all you will need to analyze a variety of acids, bases, and neutrals.

- Reduce the amount of time spent performing method development
- Eliminate the need to train technicians on multiple methods
- Analyze more compounds at once

SPE cannot produce consistent recoveries for acids, bases, and neutrals using a single extraction method; Phree can.



N=5 for all cleanup techniques.

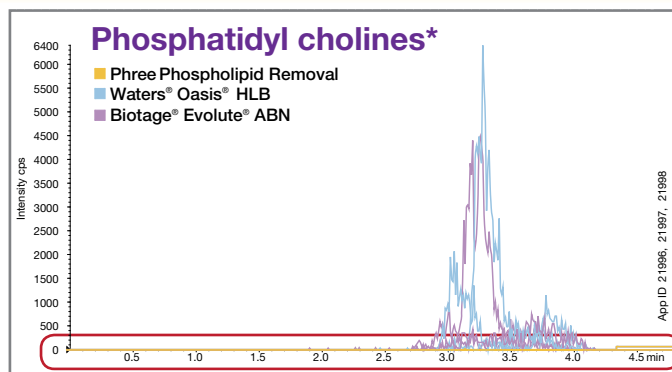
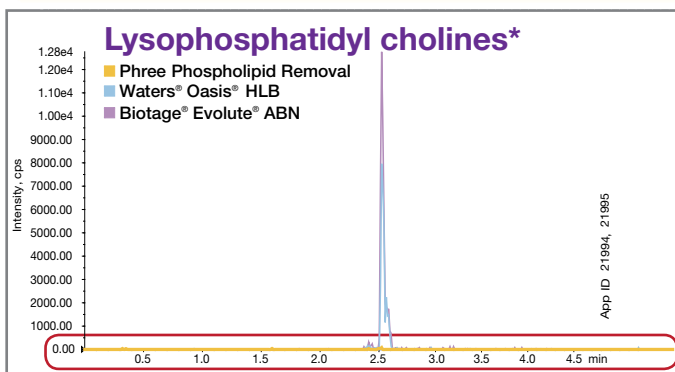
Generic reversed phase methods which were included with the Waters® Oasis® HLB and Biotage® Evolute® ABN products were used.

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Achieve Clean Samples, While Saving Time and Money

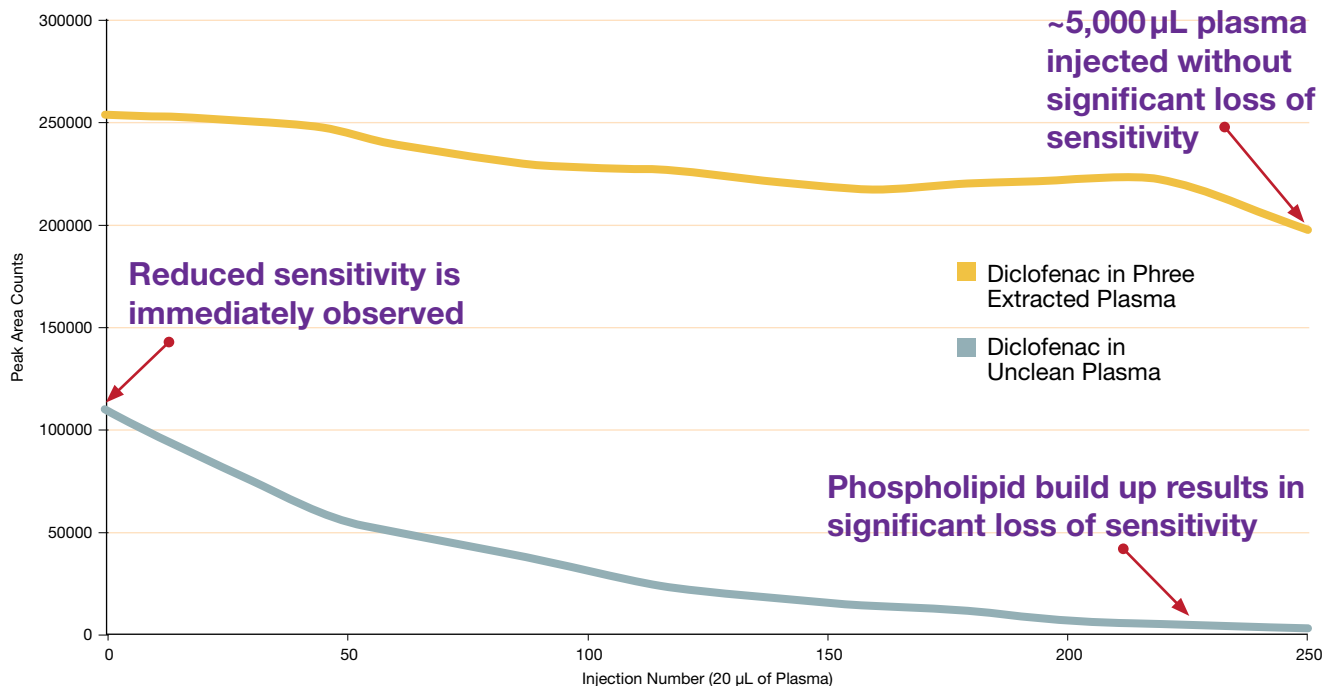
Phree™ Phospholipid Removal products can selectively remove >99 % of phospholipids from bioanalytical samples, including lysophosphatidyl cholines and phosphatidyl cholines.

Presence of 2 Major Phospholipid Classes in SPE vs. Phree Extracted Plasma



Phospholipids can drastically reduce MS sensitivity and column lifetime. Reversed phase SPE does not completely remove phospholipids without extensive method development.

HPLC/UHPLC Column Sensitivity after 250 Injections of Phree Extracted vs. Unclean Plasma



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.

*5 major phospholipids outlined below were monitored using their respective MRMs.

Lyso-1 : Palmitoyl-2-OH-sn-glycero-phosphocholine, 496>184 m/z

Lyso-2 : 1-Oleoyl-2-OH-glycero-phosphocholine, 522>184 m/z

PC-1 : 1-Palmitoyl-2-Oleoyl-sn-glycerol-phosphocholine, 760>184 m/z

PC-2 : 1-Stearoyl-2-Linoleoyl-sn-glycerol-phosphocholine, 786>184 m/z

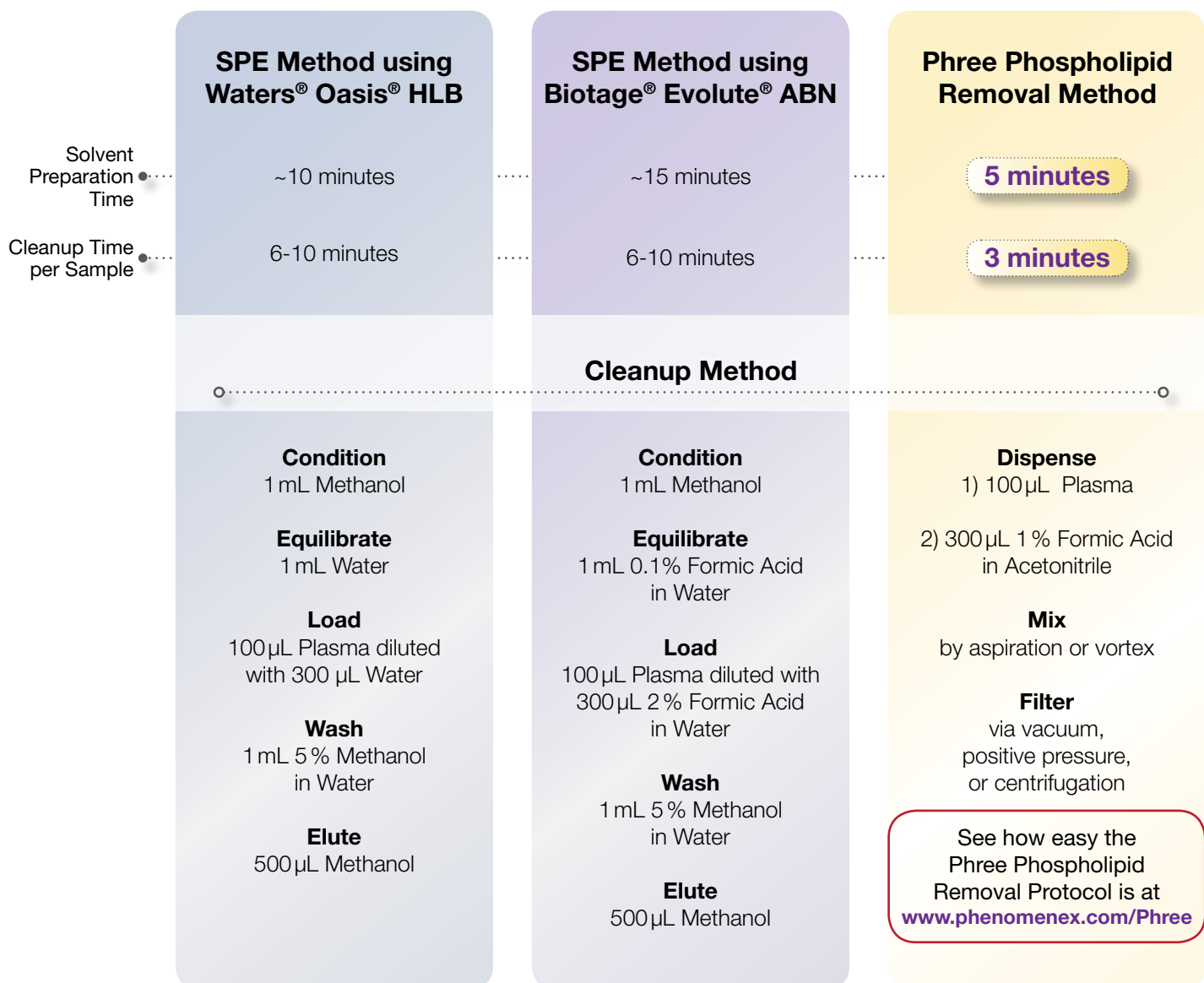
PC-3 : 1-Oleoyl-2-Linoleoyl-sn-glycerol-phosphocholine, 784>184 m/z

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Double Your Productivity

The Phree™ Phospholipid Removal method is rapid and simple to perform. With 3-7 minutes of time savings per sample plus 5-10 minutes of time savings for solvent preparation, your lab will instantly become more productive.

SPE requires >2x the amount of time per sample as compared to Phree Phospholipid Removal.



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SPE and Phree Phospholipid Removal procedures were performed manually using single tubes. Time required per sample may vary based on automation capabilities.

Ordering Information

Phree™ Phospholipid Removal Products

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

Accessories

Collection Plates (deep well, polypropylene)

AH0-7192	96-Well Collection Plate, 350 µL/well	50/pk
AH0-7193	96-Well Collection Plate, 1 mL/well	50/pk
AH0-7194	96-Well Collection Plate, 2 mL/well	50/pk
AH0-8635	96-Well Collection Plate, 2 mL Square/Round-Conical	50/pk
AH0-8636	96-Well Collection Plate, 2 mL Round/Round, 8 mm	50/pk
AH0-7279	96-Well Collection Plate, 1 mL/well Round, 7 mm	50/pk

Sealing Mats

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
AH0-7362	Sealing Tape Pad	10/pk

Vacuum Manifolds

AH0-6023*	SPE 12-Position Vacuum Manifold Set, for tubes	ea
AH0-6024*	SPE 24-Position Vacuum Manifold Set, for tubes	ea
AH0-8950	96-Well Plate Manifold, Universal with Vacuum Gauge	ea

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

guarantee

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

Access videos, trainings,
technical notes, and more at
www.phenomenex.com/Phree.

Terms and Conditions

Subject to Phenomenex Standard Terms and Conditions, which may be viewed at www.phenomenex.com/TermsAndConditions.

Trademarks

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Disclaimer

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- Skip the Method Development
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