

# Impact™

Finally an Easier Solution  
for Protein Precipitation



 **phenomenex**<sup>®</sup>  
...breaking with tradition<sup>SM</sup>



# Rapid Protein Precipitation without the Complications

## Fast Analysis

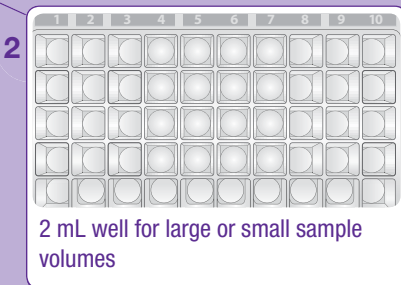
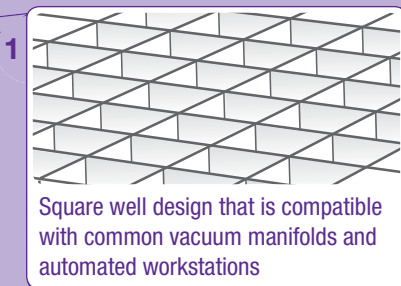
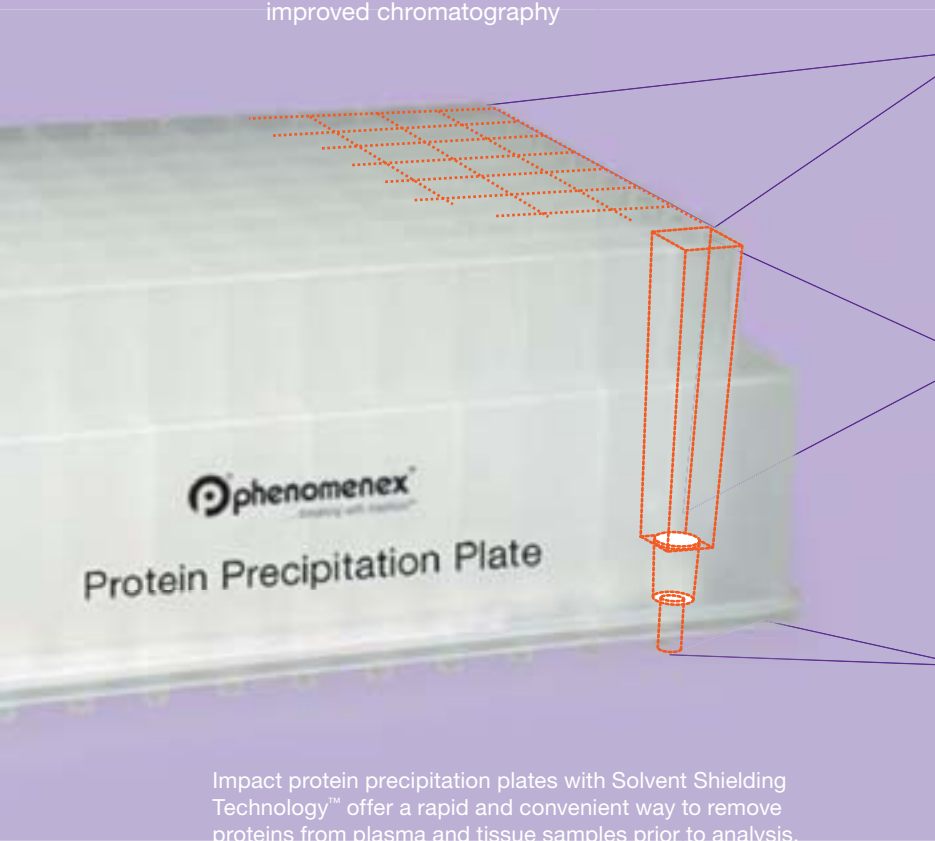
- Save time and increase efficiency by performing precipitation and filtration sequentially in the same plate
- Fast, easy to follow protocol; clean 96 samples in under 15 minutes
- Automatable process for higher productivity

## No More Filtrate Transfer Steps

- No manual or automated filtrate transfer steps required
- Reduce errors and risk of contamination

## Peace of Mind

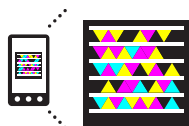
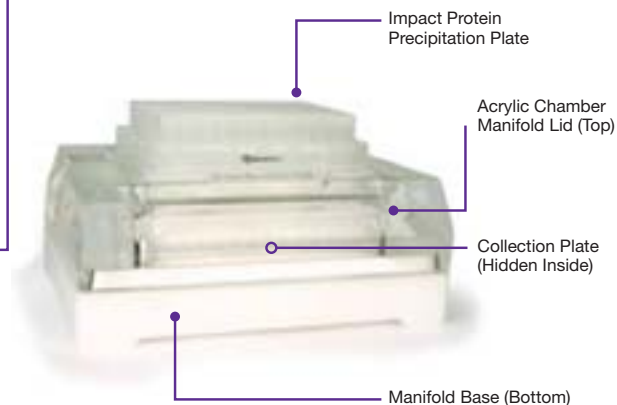
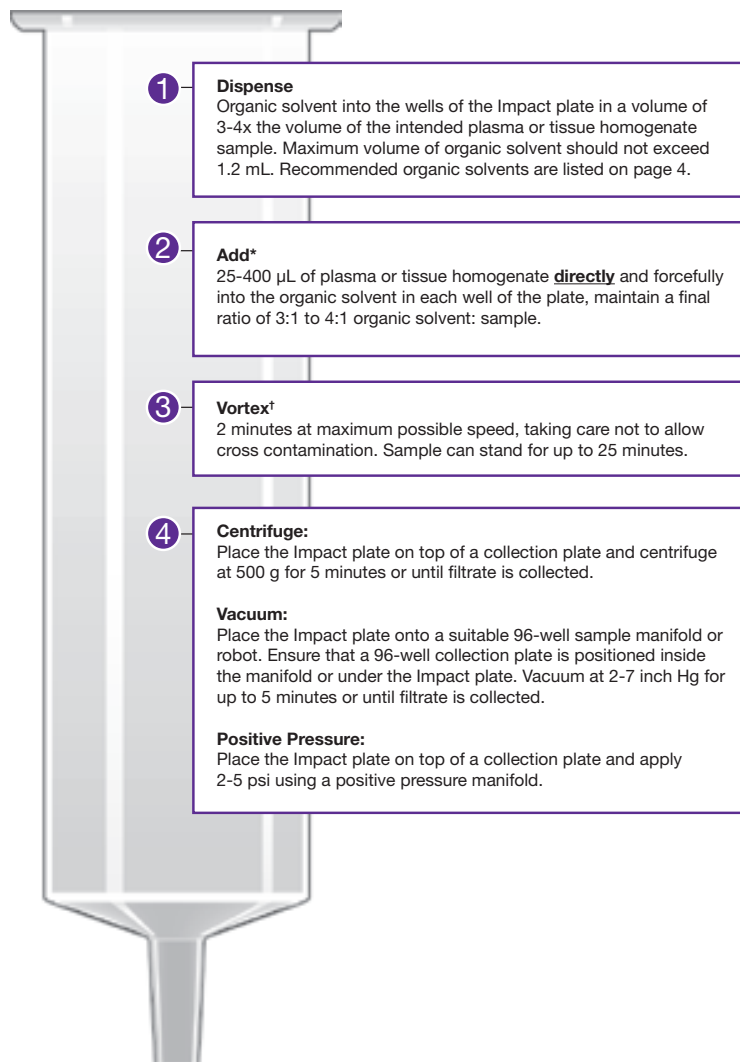
- Filtering instead of pelleting precipitated protein ensures clean samples without additional transfer steps
- Avoid injecting protein onto your column resulting in longer column lifetime and improved chromatography



Impact protein precipitation plates with Solvent Shielding Technology™ offer a rapid and convenient way to remove proteins from plasma and tissue samples prior to analysis. The Solvent Shielding Technology design will withhold organic solvents above the filter membranes for up to 25 minutes, allowing for direct in-well precipitation upon sample addition. The precipitate is then filtered out via vacuum, centrifuge or positive pressure resulting in a clean, protein depleted extract.

## Process 96 Plasma or Tissue Samples At Once

- Direct-in-plate precipitation and filtration for faster analysis
- No resuspension of pelleted protein
- Versatile solvent compatibility; precipitate with acetonitrile or methanol
- Efficient precipitation with no cross-contamination or clogging



Get the free mobile app at <http://gettag.mobi>

Watch how easy it is right now!  
Or visit [www.phenomenex.com/impactbr](http://www.phenomenex.com/impactbr) to view the video demonstration.

\* 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.

## Product Specifications

Impact Plates	
Recommended Organic Solvents	Acetonitrile Methanol
Recommended Biological Samples	Plasma Tissue homogenate
Maximum Biological Sample Volume	400 µL
Recommended Minimum Organic Solvent:Biological Sample Ratio	3:1 to 4:1 (v/v)
Maximum Total Combined Liquid Volume (Organic Solvent plus Biological Sample)	1.6 mL
Leak Resistant Time	Up to 25 minutes with no vacuum/pressure

## Ordering Information

Part No.	Description	Unit/Box	Price
<b>Impact Precipitation Plates</b>			
CEO-7565	Impact Protein Precipitation, Square Well, Filter Plate, 2 mL	2/Box	
<b>Protein Starter Kit for Protein Precipitation</b>			
CEO-8201	Impact Protein Precipitation Plate (2 ea) Collection Plate 2 mL (2 ea) Sealing Mat, Santoprene™ (2 ea)	2 ea	
<b>Manifolds, Collection Plates and Sealing Mats</b>			
AHO-8950	Strata® 96-Well Plate Manifold, Universal with Vacuum Gauge	ea	
AHO-7192	Strata 96-Well Collection Plate, 350 µL Conical Polypropylene	50/pk	
AHO-7193	Strata 96-Well Collection Plate, 1 mL Conical, Polypropylene	50/pk	
AHO-7194	Strata 96-Well Collection Plate, 2 mL Conical, Polypropylene	50/pk	
AHO-7279	Strata 96-Well Collection Plate, 1 mL Round, 7 mm, Polypropylene	50/pk	
AHO-8635	Strata 96-Well Collection Plate, 2 mL Square/Round-Conical, Polypropylene	50/pk	
AHO-8636	Strata 96-Well Collection Plate, 2 mL Round/Round, 8 mm, Polypropylene	50/pk	
AHO-8597	Sealing Mats, Pierceable, 96 Square Well, Silicone	50/pk	
AHO-8598	Sealing Mats, Pre-Slit, 96-Square Well, Silicone	50/pk	



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

## Terms and Conditions

Subject to Phenomenex Standard Terms and Conditions, which may be viewed at [www.phenomenex.com/termsandconditions](http://www.phenomenex.com/termsandconditions).

## Trademarks

Strata is a registered trademark, and Impact and Solvent Shielding Technology are trademarks of Phenomenex. Waters is a registered trademark, and Sirocco is a trademark of Waters Corporation. Santoprene is a trademark of Exxon Mobil Corp.

## Disclaimer

Comparative separations may not be representative of all applications. Phenomenex is in no way affiliated with Waters Corp. or Exxon Mobil Corp.

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**For any questions, assistance, or troubleshooting please contact your Sample Preparation Specialist at Phenomenex.**



## www.phenomenex.com

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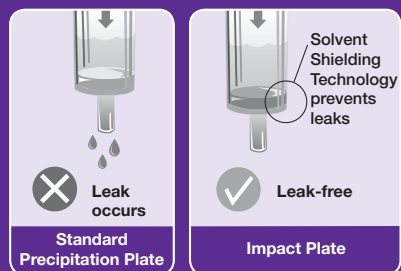
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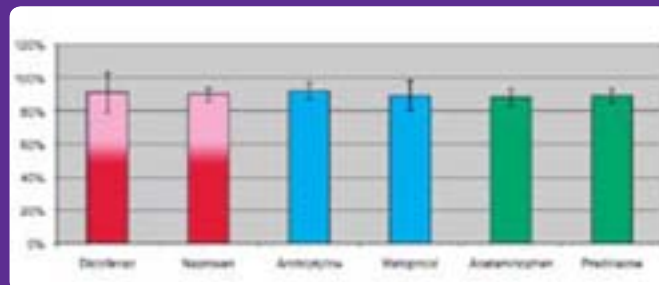
# Designed to Eliminate the Problems of Conventional Filter Plates

**Leak-Free Protein Precipitation** The oleophobic filters of the Impact plates effectively hold organic solvent allowing the precipitation reaction to occur inside the plate. Unlike conventional protein precipitation plates, Impact will not leak solvent or sample until force is applied resulting in clean precipitation.



Can retain organic solvent with no leaks for up to 25 minutes

## High Recoveries of Acids, Bases and Neutrals



### Absolute Recoveries of Spiked Plasma Samples (n=4)

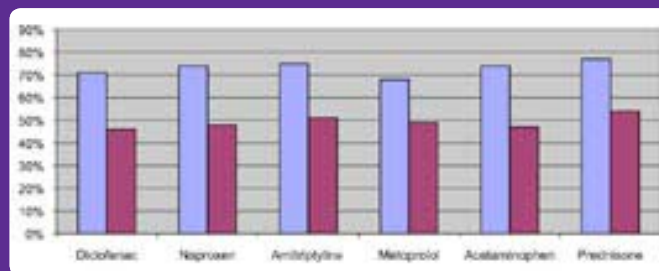
	Diclofenac	Naproxen	Amitriptyline	Metoprolol	Acetaminophen	Prednisone
Recovery	91%	90%	92%	89%	88%	89%
RSD	12%	4%	5%	9%	5%	4%

Acid █  
 Base █  
 Neutral █

**Versatility** The unique Impact filters allow plasma and homogenized tissue samples to be precipitated using either acetonitrile or methanol.

**Maximized Recovery** Non-specific binding of analytes on the membrane surface leads to reduced analyte recovery. Impact has specially treated filters, which will not bind target analytes resulting in maximized recovery.

## Phenomenex Impact vs. \*Waters® Sirocco™



### Absolute Recovery of Analytes from Tissue Homogenate

Analyte	Phenomenex Impact	*Waters® Sirocco™
Diclofenac	71%	46%
Naproxen	74%	48%
Amitriptyline	75%	51%
Metoprolol	68%	49%
Acetaminophen	74%	47%
Prednisone	77%	54%

Phenomenex Impact █  
 Waters® Sirocco™ █

**Better Throughput** Impact allows for direct-in-plate precipitation, which reduces the amount of sample transfer steps. This means that solvent and sample can be combined directly in the well without the plate leaking leading to increased throughput.

\*Sirocco is a trademark of Waters Corporation. Phenomenex is not affiliated with Waters Corporation. Comparative separations may not be representative of all applications.

# Rapid Protein Precipitation without the Complications

No More  
**Dirty Samples**




No More  
**Transfer Steps**



No More  
**Long Waiting**



 **Impact**<sup>™</sup>  
Finally an Easier Solution  
for Protein Precipitation