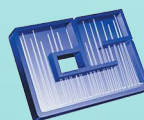


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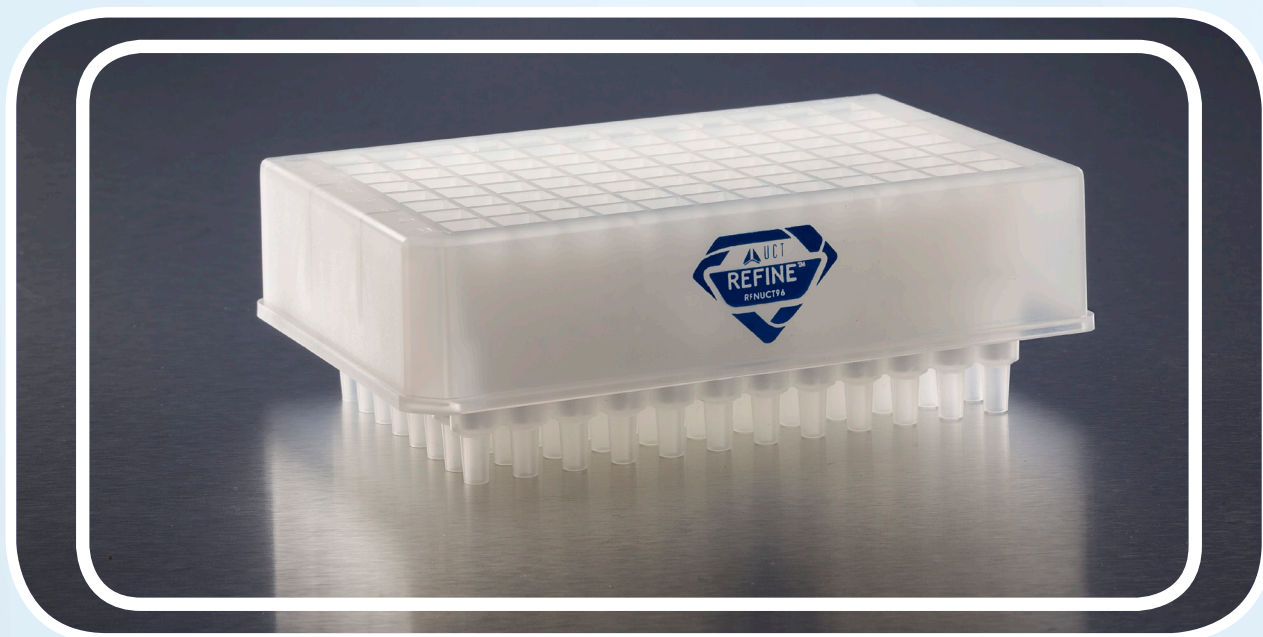
# UCT's All New Refine™ 96 Well Ultra-Filtration Plate

Your Solution for Maximizing Protein  
Precipitation, Filtration, &  
Direct In-well Urinary Enzyme Hydrolysis.

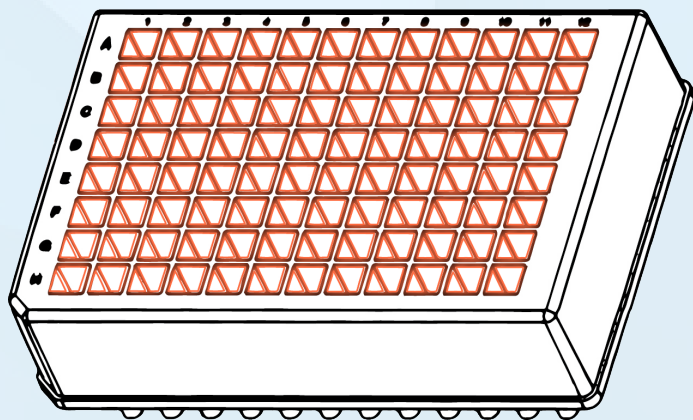
# Refine™ 96 Well Ultra-Filtration Plate

Various biological sample types commonly contain proteins that complicate downstream analysis if not effectively removed. The use of UCT's all new **Refine™** 96 Well Ultra-Filtration Plates allow for sample precipitation and filtration to occur simultaneously in the same plate providing a fast and easy-to-follow protocol in under 15 minutes.

The novel, hydrophobically treated, dual frit combo mitigates any leakage of the sample/organic solvent through the plate before the application of negative or positive pressure. This ensures adequate filtering rather than pelleting precipitated proteins, not only extending the lifetime of an analytical column, but also eliminating any sample transfer steps.

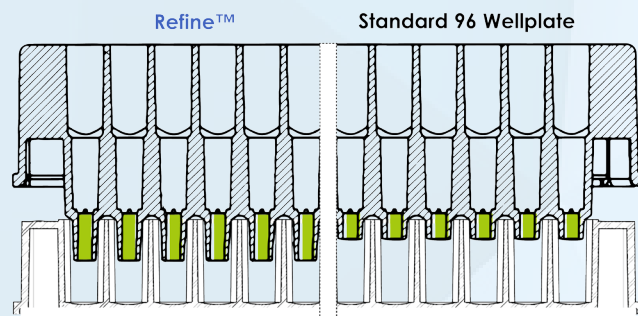


Part Number	Description	Quantity
RFNUCT96	96 WELL ULTRA-FILTRATION PLATE	1



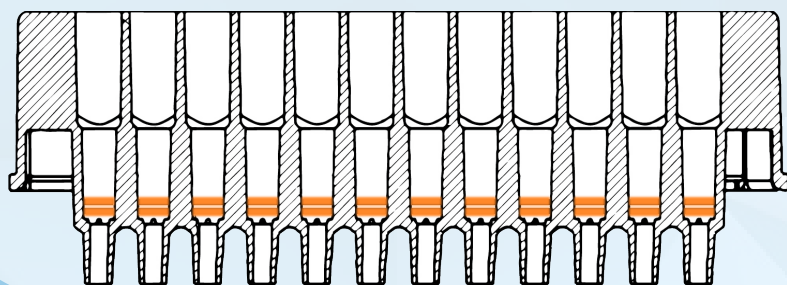
1

Standard SBS wellplate footprint compatible with common vacuum/positive pressure manifolds



2

Extended tip length when compared to standard wellplate depth minimizing the risk of inter-well crossspray



3

Proprietary submicron dual-frit combination capable of withholding organic solvent and direct in-well precipitation and filtration

- ◆ Can be used with a wide range of biological sample types, such as plasma and urine.
- ◆ Accommodates in-well urinary enzyme hydrolysis and can withstand high incubation temperatures.
- ◆ Provides additional clean-up and filtration for cannabis analysis.
  - ◆ Processes 96 samples in less than 20 minutes.
- ◆ Long-drip tips reduce sample errors and risk of inter-well contamination and cross-talk.
- ◆ Works on all current manual or automated processing instrumentation.



# Refine™ 96 Well Ultra-Filtration Plate

## Rapid Sample Prep Without the Hassle

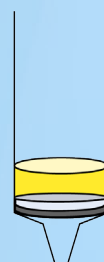
1

Place the appropriate collection plate beneath the Refine™ 96 Well Ultra-Filtration Plate.



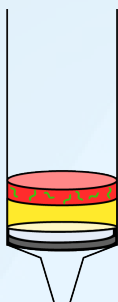
2

Dispense organic solvent into each well typically in a volume of 3-4x times the intended sample volume. Maximum volume of solvent, depending on usage, should not exceed 500  $\mu$ L.



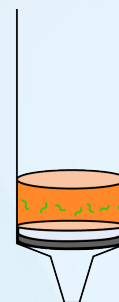
3

Add 20-500  $\mu$ L of sample with force to the center of each well depending on the desired ratio of solvent:sample, with common values being 3:1 or 4:1.



4

Vortex at max speed to adequately mix/precipitate the sample. An alternative option is to mix via pipette, where multiple aspirate/dispense repetitions are executed upon sample addition.



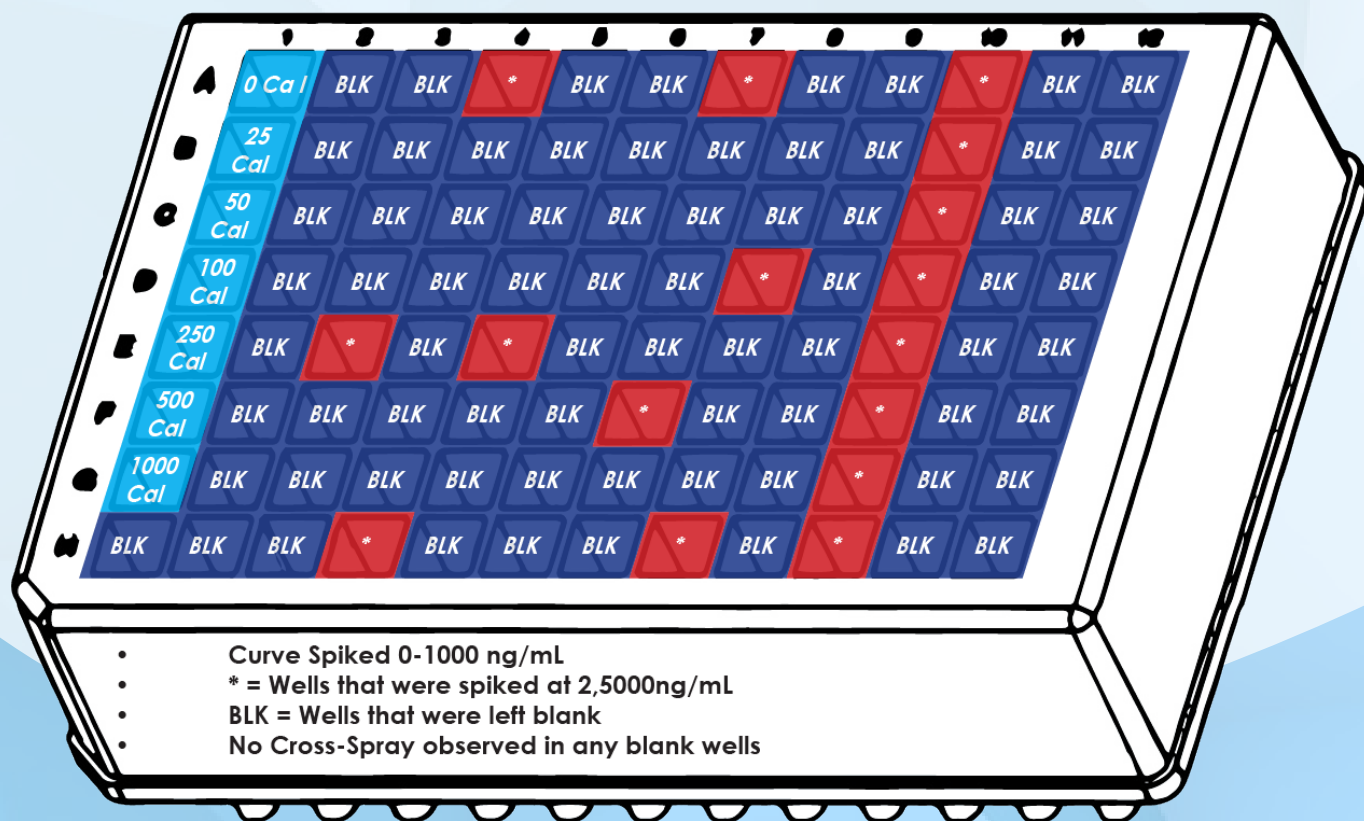
5

Filter the sample by using any of the below techniques:

- a) **Centrifuge** – Ensure the Refine™ 96 Well Ultra-Filtration Plate and collection plate are properly sealed and then centrifuge at 500g for 5 minutes or until filtrate is collected.
- b) **Vacuum** – Position the Refine™ 96 Well Ultra-Filtration Plate and collection plate inside the manifold and apply vacuum at ~20" of Hg for up to 5 minutes or until filtrate is collected.
- c) **Positive Pressure** - Ensure the Refine™ 96 Well Ultra-Filtration Plate and collection plate are properly sealed and apply 2-5 psi using positive pressure for up to 5 minutes or until filtrate is collected.



# Cross Contamination Eliminated with Refine's™ Featured Extended Tip Lengths



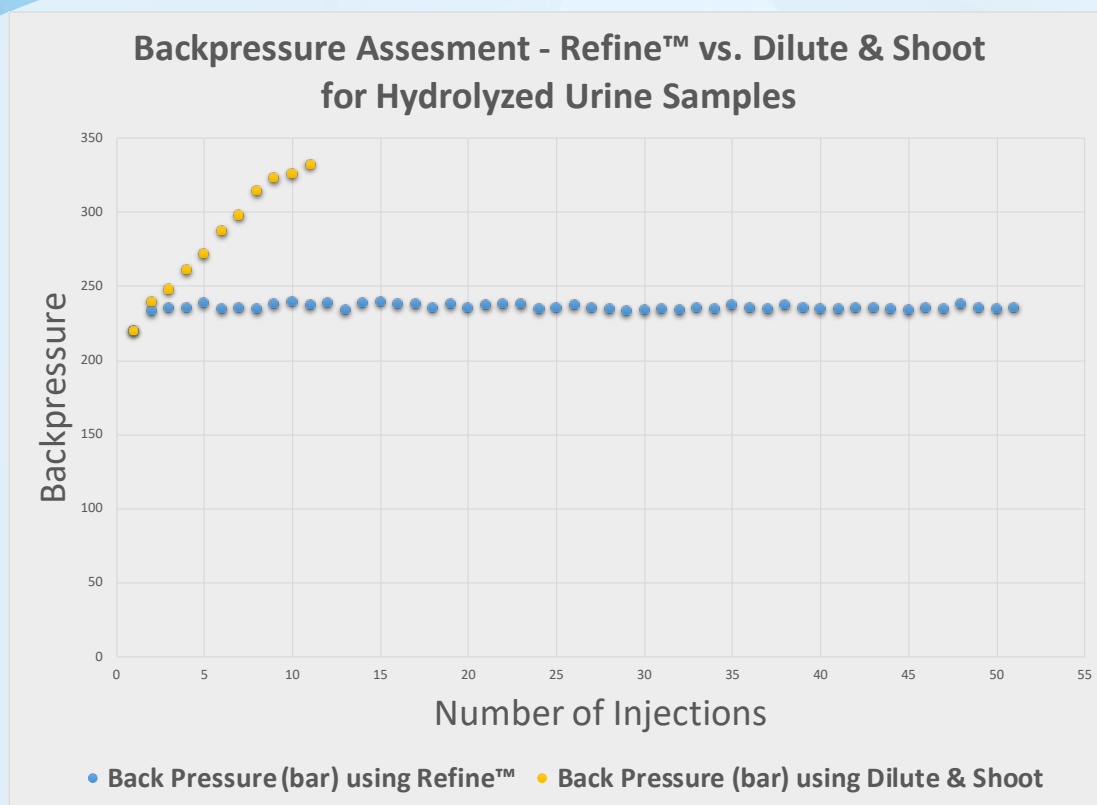
Selected wells were spiked with representative analytes at two and a half times the concentration of the highest calibrator, designated in red. All corresponding wells in proximity to those at ultra-high concentrations were spiked with just internal standard in an attempt to detect any residual cross-talk, if exhibited, during sample processing. All intentionally blank wells were reported with “zero-drug” detected.

# Refine™ 96 Well Ultra-Filtration Plate

## Clean-Up Hydrolyzed Urine Samples Minimizing Analytical Backpressure Build-Up in Less Than 60 Seconds

The Refine™ 96 Well Ultra-Filtration Plate allows for both on-plate hydrolysis and subsequent targeted removal of  $\beta$ -glucuronidase without requiring additional time or method development. The effective removal of enzyme can lead to:

- ◆ An increase in HPLC/UPLC column life
- ◆ Enhanced selectivity
- ◆ Overall reduction in instrument maintenance



**Dilute & Shoot sample preparation leads to pressure build-up in < 15 injections!**



UCT also offers this proprietary ultra-filtration technology in 1 and 3 mL SPE column formats.

Part Number	Description	Quantity
RFNSPE1	1 mL Ultra-Filtration Column	100
RFNSPE3	3 mL Ultra-Filtration Column	50





### PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Lewistown, PA 17044. Terms of payment are net 30 days.

### MINIMUM ORDERS

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

### SHIPMENTS

Normal processing is within 24 hours after receipt of an order. Unless special shipping requests have been made, our trained staff will send all orders by UPS Ground service. The appropriate shipping charges (freight & insurance costs) will be added to the invoice, unless otherwise instructed by the customer.

### SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. These discounts apply to bonded phase extraction column purchases only. Please call a sales representative for more information on special pricing qualifications.

### RETURN POLICY

Our Quality Manager will handle all returns. Before returning merchandise, please call to obtain a return authorization number from the quality manager. We will need to know the reason for the return, date of purchase, purchase order number and invoice number in order to issue a return authorization number. Return merchandise must be received before a credit can be issued. Returns will not be accepted after 90 days. A restocking fee of 25% of the price paid, or a minimum of \$25.00 (whichever is greater) will be charged on all returns.

### WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period. The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing and must include order number, the lot number and the shipping date. To initiate this action, photographs of the product, including packaging and labeling of the containers, must be submitted to the UCT Representative for approval. With approval a return authorization can be initiated, and must be received within 30 days. Once the materials arrive at UCT a further inspection of the materials must be completed and accepted by our Quality Manager prior to further action of credits or replacement. UCT's total liability is limited to the replacement cost of UCT products. This warranty does not apply to damage resulting from misuse.

### Contact Us

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