# TN-0028

# GENERAL METHODS



## Strata<sup>™</sup>-X-CW General Method for the Extraction of Weak Bases

Strata-X-CW is a novel polymeric weak cation exchange sorbent that couples a hydrophobic backbone with a carboxylic acid functional group.

This sorbent retains analytes by several different mechanisms:

Weak Cation Exchange

π-π Bonding

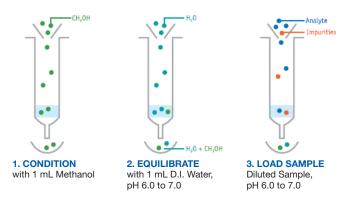
Hydrophobic Interaction

OH

# Strata-X-CW Method for Weakly Basic Compounds (1°, 2°, and 3° amines)

Note: Method uses solvent volumes appropriate for a 30 mg sorbent mass. For larger or smaller masses, refer to Technical Note TN-013.

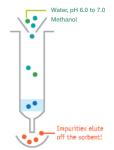
Very Important: This method is NOT suitable for the extraction of strongly basic (cationic) compounds such as organic quaternary (4°) amines. Please follow the method entitled "Strata-X-CW General Method for the Extraction of Any Base" (Technical Note TN-0027) which uses an acidic elution method.



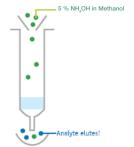
<sup>\*</sup>The methanol wash serves to remove endogenous contaminants from biological sample matrices and reduces ion suppression in LC/MS under ESI mode. This fraction will contain neutrals and acids.

The below method is suitable for weak bases such as primary (1°), secondary (2°), and tertiary (3°) amines where elution with basic pH is desired in order to neutralize the analyte of interest. The suggested ammoniated organic elution solvent is volatile and can be readily evaporated allowing the analytes to be reconstituted in any desired solvent.

For proper retention, it is necessary to load the samples within the pH range of pH 6.0 to 7.0.



4. WASH IMPURITIES with 1 mL D.I. Water, pH 6.0 to 7.0 followed by 1 mL Methanol\*



5. ELUTE WEAK BASES with 2x 500 μL 5% NH<sub>4</sub>OH in Methanol

# TN-0028

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Phenomenex products are available worldwide. For the distributor in your country, contact Phenomenex USA, International Department at international@phenomenex.com

Strata™\_Y\_CW Ordering Information

Strata X-CW Ordering Information		
Sorbent Mass	Part No.	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		
500 mg	8B-S035-HDG	12 mL (20/box)
1 g	8B-S035-JDG	12 mL (20/box)
1g	8B-S035-JEG	20 mL (20/box)
2 g	8B-S035-KEG	20 mL (20/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

Additional sizes available. Contact your Phenomenex Sample Preparation Specialist for additional information

Contact your Sample Preparation Specialist for applications, method development support, and free samples of Strata-X SPE tubes!



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.

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#### Trademarks

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The general method is a convenient starting point for SPE method development. Further optimization may be required to tailor the method to your specific needs.

Strata-X is patented by Phenomenex.

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