

APPLICATION



Extraction and Analysis of PMETs Using Strata[®]-X-CW Microelution SPE and a Luna[®] Omega Polar C18 LC Column

Jeff Layne and Matthew Brusius
Phenomenex, Inc., 411 Madrid Ave., Torrance, CA 90501 USA

Overview/Summary

This application describes a fast and effective method for extracting and analyzing plasma catecholamines and metanephrines (PMETs). Using Strata-X-CW Solid Phase Extraction (SPE), PMETs are extracted and analyzed on a thermally modified fully porous Luna Omega 3 μm Polar C18 which provides enhanced retention of polar analytes.

SPE Protocol

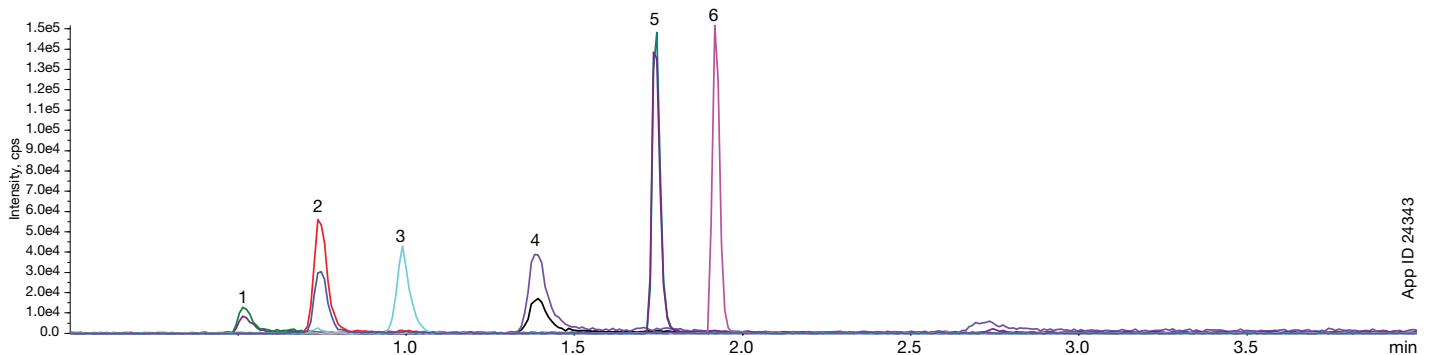
96-Well Microelution Plate: Strata-X-CW
Part No.: 8M-S035-4GA
Condition: 200 μL Methanol
Equilibrate: 200 μL 50 mM Ammonium acetate, pH 7
Load: 1 mL of pretreated sample (250 μL plasma and 750 μL 50 mM Ammonium acetate, pH 7)
Wash 1: 200 μL of 50 mM Ammonium acetate, pH 7
Wash 2: 200 μL Acetonitrile/IPA (1:1)
Dry: 3 min under high vacuum
Elute: 2x 25 μL of Water/Acetonitrile/Formic acid (85:10:5)
Inject: Dilute eluent with 100 μL of 0.1% Formic acid in water

LC-MS/MS Conditions

Column: Luna Omega 3 μm Polar C18
Dimensions: 50 x 4.6 mm
Part No.: 00B-4760-E0
Mobile Phase: A: 10 mM Ammonium Acetate
 B: 0.1% Formic Acid in Acetonitrile
Gradient:

Time (min)	% B
0	0
3	100

Injection Volume: 1 μL
Flow Rate: 0.4 mL/min
Temperature: 22 °C
Detection: MS/MS (SCIEX API 4000™)
Analytes: 1. Norepinephrine
 2. Epinephrine
 3. Normetanephrine
 4. Dopamine
 5. Metanephrine
 6. Serotonin



App ID 24343



APPLICATION

Luna® Omega LC Column Ordering Information

3 µm Minibore Columns (mm)					SecurityGuard™ Cartridges (mm)
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	4 x 2.0*
Polar C18	00A-4760-AN	00B-4760-AN	00D-4760-AN	00F-4760-AN	AJO-7600
					for ID: 2.0-3.0 mm

3 µm MidBore™ Columns (mm)				SecurityGuard™ Cartridges (mm)
Phases	50 x 3.0	100 x 3.0	150 x 3.0	4 x 2.0*
Polar C18	00B-4760-YO	00D-4760-YO	00F-4760-YO	AJO-7600
				for ID: 2.0-3.0 mm

3 µm Analytical Columns (mm)					SecurityGuard™ Cartridges (mm)
Phases	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	4 x 3.0*
Polar C18	00B-4760-E0	00D-4760-E0	00F-4760-E0	00G-4760-E0	AJO-7601
					for ID: 3.2-8.0 mm

*SecurityGuard Analytical Cartridges require holder, Part No.: KJO-4282

Strata®-X-CW SPE Ordering Information

96-Well Microelution Plate			
	Sorbent Mass	Part Number	Unit
	2 mg	8M-S035-4GA	1/box



If Phenomenex products in this technical note do not provide at least an equivalent separation as compared to a competing product of the same particle size, similar phase and dimensions, return the product with comparative data within 45 days for a FULL REFUND.

Terms and Conditions

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

Trademarks

Strata and Luna are registered trademarks and SecurityGuard and MidBore are trademarks of Phenomenex. API 4000 is a trademark of AB SCIEX Pte. Ltd. AB SCIEX is being used under license.

Disclaimer

Strata-X is patented by Phenomenex. U.S. Patent No. 7,119,145

SecurityGuard is patented by Phenomenex. U.S. Patent No. 6,162,362

CAUTION: this patent only applies to the analytical-sized guard cartridge holder, and does not apply to SemiPrep, PREP or ULTRA holders, or to any cartridges.

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Australia
t: +61 (0)2-9428-6444
f: +61 (0)2-9428-6445
auiinfo@phenomenex.com

Austria
t: +43 (0)1-319-1301
f: +43 (0)1-319-1300
anfrage@phenomenex.com

Belgium
t: +32 (0)1 503 4015 (French)
t: +32 (0)2 511 8666 (Dutch)
f: +31 (0)30-2383749
beinfo@phenomenex.com

Canada
t: +1 (800) 543-3681
f: +1 (310) 328-7768
info@phenomenex.com

China
t: +86 400-606-8099
f: +86 (0)22 2532-1033
phen@agela.com

Denmark
t: +45 4824 8048
f: +45 4810 6265
nordicinfo@phenomenex.com

Finland
t: +358 (0)9 4789 0063
f: +45 4810 6265
nordicinfo@phenomenex.com

France
t: +33 (0)1 30 09 21 10
f: +33 (0)1 30 09 21 11
franceinfo@phenomenex.com

Germany
t: +49 (0)6021-58830-0
f: +49 (0)6021-58830-11
anfrage@phenomenex.com

India
t: +91 (0)40-3012 2400
f: +91 (0)40-3012 2411
indiainfo@phenomenex.com

Ireland
t: +353 (0)1 247 5405
f: +44 1625-501796
eireinfo@phenomenex.com

Italy
t: +39 051 6327511
f: +39 051 6327555
italiainfo@phenomenex.com

www.phenomenex.com

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

Luxembourg
t: +31 (0)30-2418700
f: +31 (0)30-2383749
nlinfo@phenomenex.com

Mexico
t: 01-800-844-5226
f: 001-310-328-7768
tecnicomx@phenomenex.com

The Netherlands
t: +31 (0)30-2418700
f: +31 (0)30-2383749
nlinfo@phenomenex.com

New Zealand
t: +64 (0)9-4780951
f: +64 (0)9-4780952
nzinfo@phenomenex.com

Norway
t: +47 810 02 005
f: +45 4810 6265
nordicinfo@phenomenex.com

Puerto Rico
t: +1 (800) 541-HPLC
f: +1 (310) 328-7768
info@phenomenex.com

Spain
t: +34 91-413-8613
f: +34 91-413-2290
espinfo@phenomenex.com

Sweden
t: +46 (0)8 611 6950
f: +45 4810 6265
nordicinfo@phenomenex.com

United Kingdom
t: +44 (0)1625-501367
f: +44 (0)1625-501796
ukinfo@phenomenex.com

USA
t: +1 (310) 212-0555
f: +1 (310) 328-7768
info@phenomenex.com

**All other countries
Corporate Office USA** 
t: +1 (310) 212-0555
f: +1 (310) 328-7768
info@phenomenex.com