

## Separation of MDMA Enantiomers Using a Lux<sup>®</sup> 3 $\mu$ m AMP Chiral Column

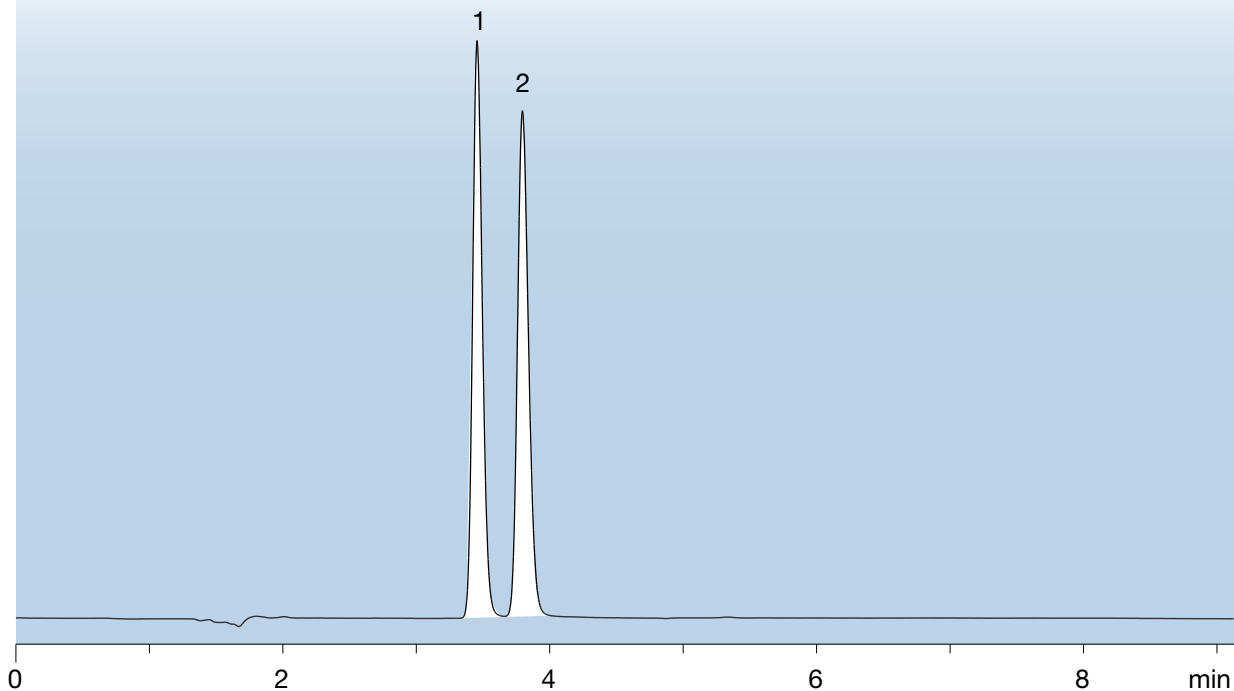
Morgan Kramer and Simon Lomas  
Phenomenex, Inc., 411 Madrid Ave., Torrance, CA 90501 USA

### Overview

3,4-Methylenedioxymethamphetamine (MDMA) is an amphetamine derivative that exists as two enantiomers. This application illustrates a rapid and enantioselective separation of these two MDMA enantiomers using a Lux 3  $\mu$ m AMP chiral column.

### LC/UV Conditions

**Column:** Lux 3  $\mu$ m AMP  
**Dimensions:** 150 x 4.6 mm  
**Part No.:** 00F-4751-E0  
**Mobile Phase:** 5 mM Ammonium Bicarbonate adjusted to pH 11 with Ammonium Hydroxide/Acetonitrile (40:60)  
**Flow Rate:** 0.4 mL/min  
**Injection:** 2  $\mu$ L  
**Temperature:** Ambient  
**Detection:** UV @ 218 nm  
**Sample:** 1. R-MDMA  
2. S-MDMA



App ID 23674



# APPLICATION

## Lux AMP Ordering Information

Phase	Lux® 3 µm Analytical Columns		SecurityGuard™ Cartridges*	
	150 x 3.0	150 x 4.6	10/pk	10/pk
AMP	00F-4751-Y0	00F-4751-E0	AJO-8475	AJO-8476

\*SecurityGuard Cartridges require holder, Part No.: KJ0-4284

### 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)2 503 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 (0)20 2282-6668  
f: +86 (0)20 2809-8130  
chinainfo@phenomenex.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

### 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



If Phenomenex products in this technical note do not provide at least an equivalent separation as compared to other products of the same 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 <http://www.phenomenex.com/TermsAndConditions>.

### Trademarks

Phenomenex and Lux are registered trademarks and SecurityGuard is a trademark of Phenomenex.

Comparative separations may not be representative of all applications.

© 2016 Phenomenex, Inc. All rights reserved.

## www.phenomenex.com

Phenomenex products are available worldwide. For the distributor in your country, contact Phenomenex USA, International Department at [international@phenomenex.com](mailto:international@phenomenex.com)