

# HPLC Application

ID No.: 25782

## Chiral Separation of Dextromethorphan/Levomethorphan and Dextrorphan/Levorphanol on Lux 3u AMP, 150x4.6

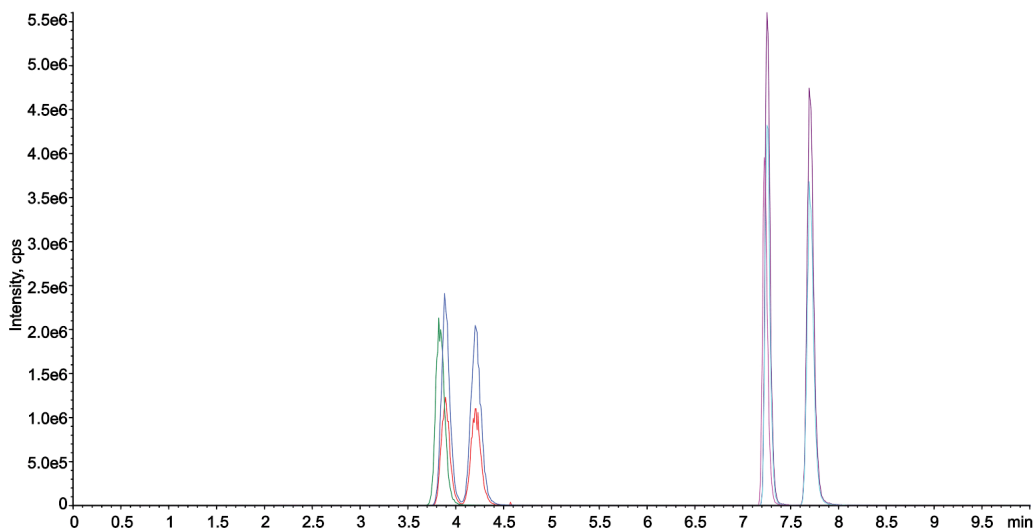
**Column:** Lux<sup>®</sup> 3  $\mu$ m AMP, LC Column 150 x 4.6 mm, Ea  
**Dimensions:** 150 x 4.6 mm ID  
**Order No:** 00F-4751-E0  
**Elution Type:** Gradient  
**Eluent A:** 5mM ammonium bicarbonate, adjusted to pH 11 with ammonium hydroxide  
**Eluent B:** Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	55	45
	2	4.5	55	45
	3	4.6	20	80
	4	8	20	80
	5	8.1	55	45
	6	10	55	45

**Flow Rate:** 1 mL/min  
**Col. Temp.:** 40 °C  
**Detection:** LC/MS/MS @ (ambient)  
**Analyst Note:** Urine hydrolyzed with beta-glucuronidase and extracted with Strata-X-C



Products used in this application:



## Chiral Separation of Dextromethorphan/Levomethorphan and Dextrorphan/Levorphanol on Lux 3u AMP, 150x4.6

### ANALYTES:

- 1 Dextrorphan-D3
- 2 Dextrorphan 1
- 3 Dextrorphan 2
- 4 Levorphanol 1
- 5 Levorphanol 2
- 6 Dextromethorphan-D3
- 7 Dextromethorphan 1
- 8 Dextromethorphan 2
- 9 Levomethorphan 1
- 10 Levomethorphan 2



# Sample Preparation Details

for HPLC Application ID No.: 25782

## Chiral Separation of Dextromethorphan/Levomethorphan and Dextrorphan/Levorphanol on Lux 3u AMP, 150x4.6

### PRODUCT DESCRIPTION:

Strata<sup>™</sup>-X-C 33 µm Polymeric Strong Cation, 30 mg / well, 96-Well Plates , 2/Pk

Order No.: 8E-S029-TGB

### SOLID PHASE EXTRACTION (SPE) PROCEDURE:

**Note:** The solvent volumes shown below are for a bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

#### Condition:

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#### Load:

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#### Wash:

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#### Dry:

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#### Elute:

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### Final Prep and Analysis:

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Urine sample pretreatment: Combine 200µL urine sample, 200µL 100mM ammonium acetate buffer (pH 4.0), 20µL internal standard solution (250ng/mL), and 20µL of beta-glucuronidase

Inject: 10 µL on HPLC LC/MS/MS @ (ambient)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 Dextrorphan-D3	0				
2 Dextrorphan 1	0				
3 Dextrorphan 2	0				
4 Levorphanol 1	0				
5 Levorphanol 2	0				
6 Dextromethorphan-D3	0				
7 Dextromethorphan 1	0				
8 Dextromethorphan 2	0				
9 Levomethorphan 1	0				
10 Levomethorphan 2	0				

**Note:** This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals. Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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For more information contact your Phenomenex Representative at support@phenomenex.com



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