HPLC Application

ID No.: **25782**

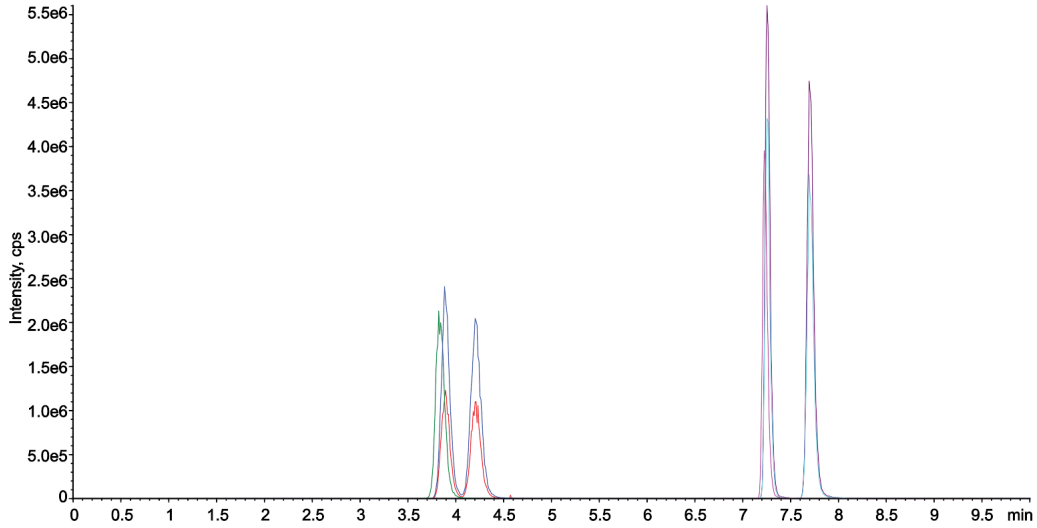
Chiral Separation of Dextromethorphan/Levomethorphan and Dextrorphan/Levorphanol on Lux 3u AMP, 150x4.6

Column: Lux® 3 µm 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:

LUX SIMPLIFIED CHIRAL SEPARATIONS

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

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PRODUCT DESCRIPTION:

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

Order No.: 8E-S029-TGB

SOLID PHASE EXTRACTION (SPE) PRODCEDURE:

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:

Load:

Wash:

Dry:

Elute:

Final Prep and Analysis:

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.*