HPLC Application

ID No.: **20028**

Penicillins in Meat by LC/MS/MS

Column: Gemini® 3 µm C18 110 Å, LC Column 150 x 4.6 mm, Ea
Dimensions: 150 x 4.6 mm ID
Order No: 00F-4439-E0
Elution Type: Gradient
Eluent A: 0.1% Ammonia in water
Eluent B: 95% Acetronitrile, 5% water and 0.1% ammonia

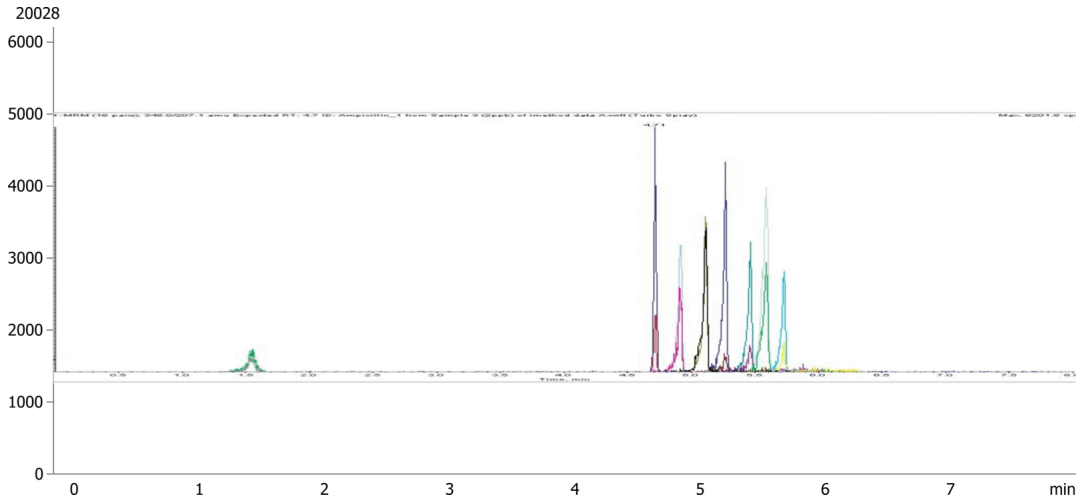
Gradient Profile:

Step No.	Time (min)	Pct A	Pct B
1	0	98	2
2	2	98	2
3	2.42	90	10
4	6	50	50
5	6.1	0	100
6	6.6	0	100
7	6.8	98	2
8	8	98	2

Flow Rate: 0.8 mL/min
Col. Temp.: 40 °C
Detection: Tandem Mass Spec (MS-MS) @ -4500 V (600 °C)
Detector Info: 3200 QTRAP
Analyst Note: This separation uses IMethod Kit Part Number KH0-9047

SecurityGuard™ Guard Cartridge System extends column lifetime.

- SecurityGuard Cartridges, Gemini C18 4 x 3.0mm ID, 10/Pk Part No.: AJ0-7597
- Holder Part No.: KJ0-4282



Products used in this application:

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

Phenomenex products are available worldwide.

Penicillins in Meat by LC/MS/MS

ANALYTES:

1 Amoxicillin
2 Ampicillin
3 Penicillin G
4 Penicillin V
5 Oxacillin
6 Cloxacillin
7 Nafcillin
8 Dicloxacillin

Sample Preparation Details

for **HPLC** Application ID No.: **20028**

Penicillins in Meat by LC/MS/MS

PRODUCT DESCRIPTION:

Strata® C18-E (55 µm, 70 Å), 200 mg / 3 mL, Tubes , 50/Pk

Order No.: 8B-S001-FBJ

SOLID PHASE EXTRACTION (SPE) PRODCEDURE:

Note: The solvent volumes shown below are for a 200 mg bed mass.
The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:

Load:

Homogenize the sample using an electric mincer. Measure 4 g of the homogenized sample into an 85 mL centrifuge tube. Add 20 m L of acetonitrile/water (10:1). Mix for 1 min using an Ultra-Turrax mixer at a velocity setting of 2. Agitate further for 5 min using

Wash:

Dry:

Elute:

Final Prep and Analysis:

The equilibration time at conditon 0 was 4 minutes before each injection.
Inject: 50 µL on HPLC Tandem Mass Spec (MS-MS) @ -4500 V (600°C)

ANALYTES:		Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1	Amoxicillin	0				
2	Ampicillin	0				
3	Penicillin G	0				
4	Penicillin V	0				
5	Oxacillin	0				
6	Cloxacillin	0				
7	Nafcillin	0				
8	Dicloxacillin	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.*