

# HPLC Application

ID No.: 20028

## Penicillins in Meat by LC/MS/MS

**Column:** Gemini<sup>®</sup> 3  $\mu$ m 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% Acetonitrile, 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

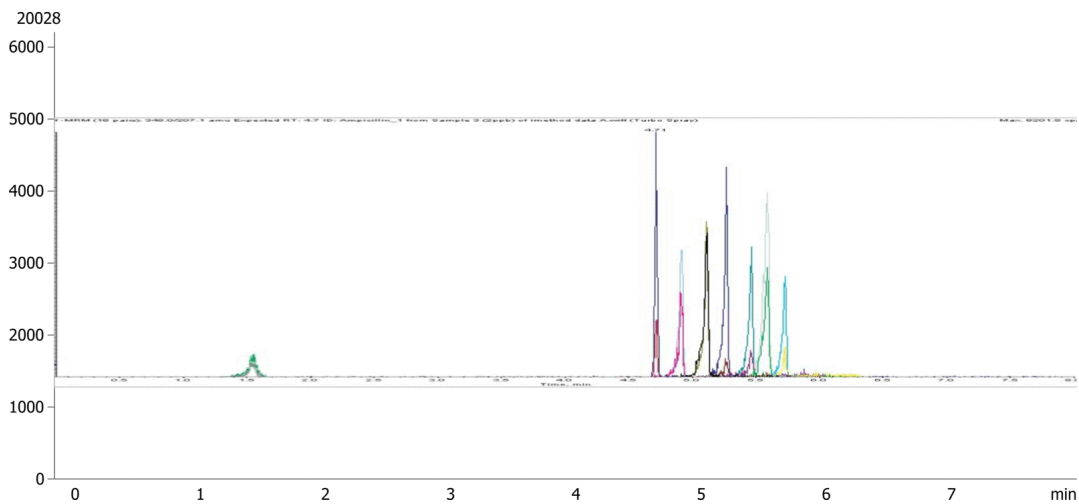
SecurityGuard<sup>™</sup> Guard Cartridge System extends column lifetime.

- 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:



## 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) PROCEDURE:

**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:

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#### Load:

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Homogenize the sample using an electric mincer. Measure 4 g of the homogenized sample into an 85 mL centrifuge tube. Add 20 mL 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:

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#### Dry:

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#### Elute:

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#### Final Prep and Analysis:

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The equilibration time at condition 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.

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



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