

# HPLC Application

ID No.: 25487

## Extraction of Vet Drugs in Milk Using Strata-X PRO with a Kinetex 2.6 µm Biphenyl 50 x 3.0mm

**Column:** Kinetex® 2.6 µm Biphenyl 100 Å, LC Column 50 x 3.0 mm, Ea

**Dimensions:** 50 x 3 mm ID

**Order No:** 00B-4622-Y0

**Elution Type:** Gradient

**Eluent A:** 0.1%Formic acid in Water

**Eluent B:** 0.1%Formic acid in Methanol

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	95	5
	2	1.5	5	95
	3	3	5	95
	4	3.01	95	5
	5	4.5	95	5

**Flow Rate:** 0.5 mL/min

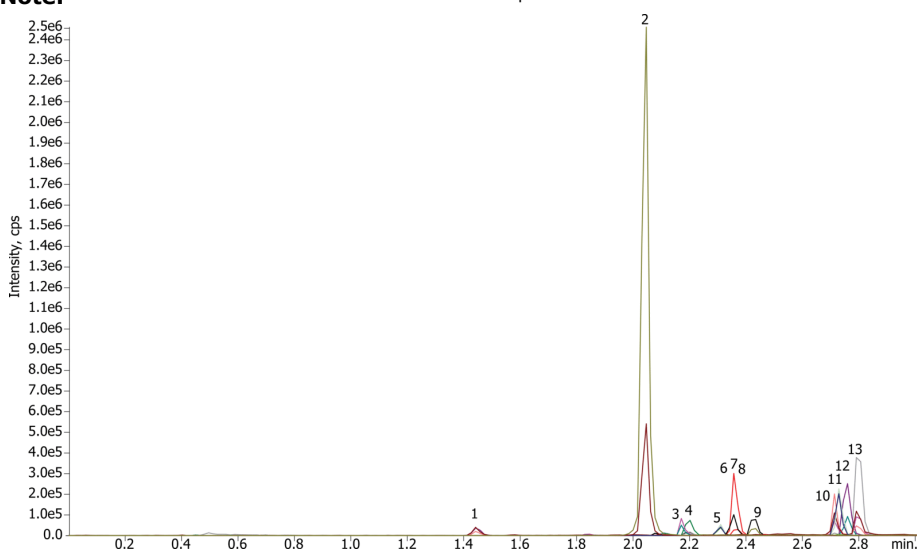
**Col. Temp.:** 45 °C

**Detection:** LC/MS/MS @ 210.000000000 nm (nanometers) (30 °C)

**Analyst Note:** ALTA DENA 2% Reduced Fat Milk With initial mobile phase



Products used in this application:



## Extraction of Vet Drugs in Milk Using Strata-X PRO with a Kinetex 2.6 $\mu$ m Biphenyl 50 x 3.0mm

### ANALYTES:

- 1 Sulfaguanidine
- 2 Lincomycin
- 3 Sulfadiazine
- 4 Cephapirin
- 5 Sulfamerazine
- 6 Sulfamethoxazole
- 7 Sulfamethizole
- 8 Cefalexin
- 9 Sulfamethazine
- 10 Cortisone
- 11 Cortisol
- 12  $\beta$ -methasone
- 13 Prednisolone



# Sample Preparation Details

for HPLC Application ID No.: 25487

## Extraction of Vet Drugs in Milk Using Strata-X PRO with a Kinetex 2.6 µm Biphenyl 50 x 3.0mm

### PRODUCT DESCRIPTION:

Strata X Pro, 60mg/3mL, 50/Pk

Order No.: 8B-S536-UBJ

### 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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To 1 mL of milk add 3 mL of 0.2% formic acid in Acetonitrile /Methanol (90:10). Mix/vortex for 15-20 secs. Centrifuge for 5 min at 10,000 rpm. Collect supernatant to perform SPE in next step.

Inject: 5 µL on HPLC LC/MS/MS @ 210.000000000 nm (nanometers) (30°C)

<b>ANALYTES:</b>	<b>Spiked Conc. (ng/mL)</b>	<b>Log P</b>	<b>pKa</b>	<b>% Rec</b>	<b>%RSC (n=0)</b>
<b>1</b> Sulfaguanidine	50			46	
<b>2</b> Lincomycin	50			92	
<b>3</b> Sulfadiazine	50			38	
<b>4</b> Cephapirin	50			76	
<b>5</b> Sulfamerazine	50			44	
<b>6</b> Sulfamethoxazole	50			53	
<b>7</b> Sulfamethizole	50			45	
<b>8</b> Cefalexin	50			66	
<b>9</b> Sulfamethazine	50			59	
<b>10</b> Cortisone	50			83	
<b>11</b> Cortisol	50			95	
<b>12</b> β-methasone	50			97	
<b>13</b> Prednisolone	50			92	

**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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