

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

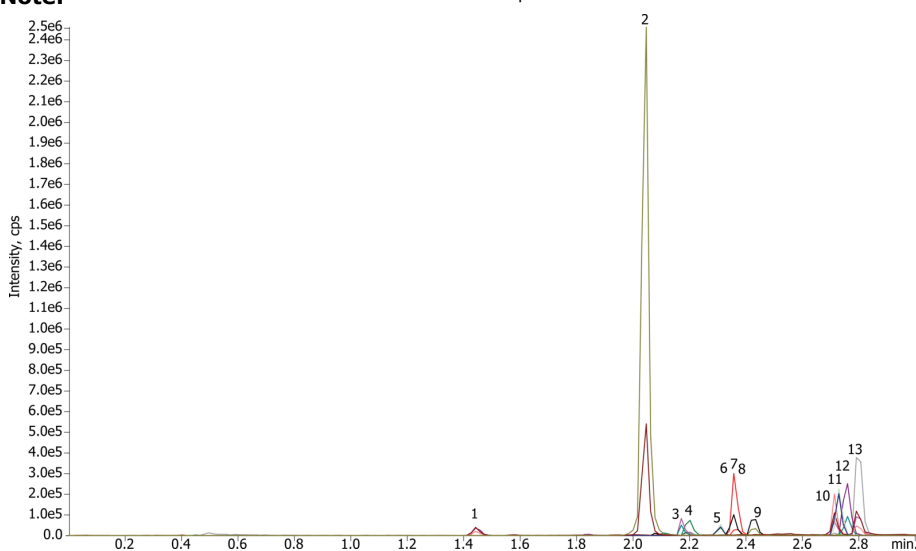
Col. Temp.: 45 °C

Detection: LC/MS/MS @ 210.0000000000 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 µm 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** β-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:

Load:

Wash:

Dry:

Elute:

Final Prep and Analysis:

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)

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