

## Multiclass Antibiotics Screening of Kidney Juice, Serum, Milk and Honey by LC/MS/MS

**Column:** Gemini® 3 µm C18 110 Å, LC Column 50 x 2 mm, Ea

**Dimensions:** 50 x 2 mm ID

**Order No:** 00B-4439-B0

**Elution Type:** Gradient

**Eluent A:** Water + 0.1% Formic Acid

**Eluent B:** Methanol + 0.1% Formic Acid

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	98	2
	2	7.27	20	80
	3	7.37	1	99
	4	11	98	2
	5	15	98	2
	6	11	98	2
	7	15	98	2

**Flow Rate:** 0.5 mL/min

**Col. Temp.:** 40 °C

**Detection:** Tandem Mass Spec (MS-MS) @ (600 °C)

**Detector Info:** <a target="\_blank"

**Analyst Note:** href="https://sciex.com/products/mass-spectrometers?utm\_campaign=2019%20application%20search&utm\_source=phenomenex&utm\_medium=referral">SCIEX<br/>Sample Prep Steps:

1. Weigh 1 g of homogenized beef kidney sample, kidney juice, or serum into a 50 mL FEP (fluorinated ethylene propylene) tube. Alternatively you can use a disposable polypropylene Corning tube.
2. Add 5 µL of the internal standard work solution.
3. Add 2 mL of water and 8 mL of acetonitrile
4. Mix briefly using a vortex mixer, and then shake for five minutes.
5. Centrifuge at 3450 rcf for five minutes.
6. Decant the supernatant into a 50 mL tube with 500 mg of Septra C18-E sorbent.
7. Mix briefly using a vortex mixer and shake for 30 seconds.
8. Centrifuge at 3450 rcf for one minute.
9. Place a 5 mL aliquot of the supernatant into a graduated tube.
10. Evaporate down to less than 1 mL.
11. Make up the volume to 1 mL with water.
12. Filter the extract through a 0.45 µm Phenex™ RC syringe filter (part no. AF0-8103-12) and then transfer to a Verex™ autosampler vial (part no. AR0-9925-13).

Note: The extracts are now ready for LC/MS/MS analysis.

SecurityGuard™ Guard Cartridge System extends column lifetime.

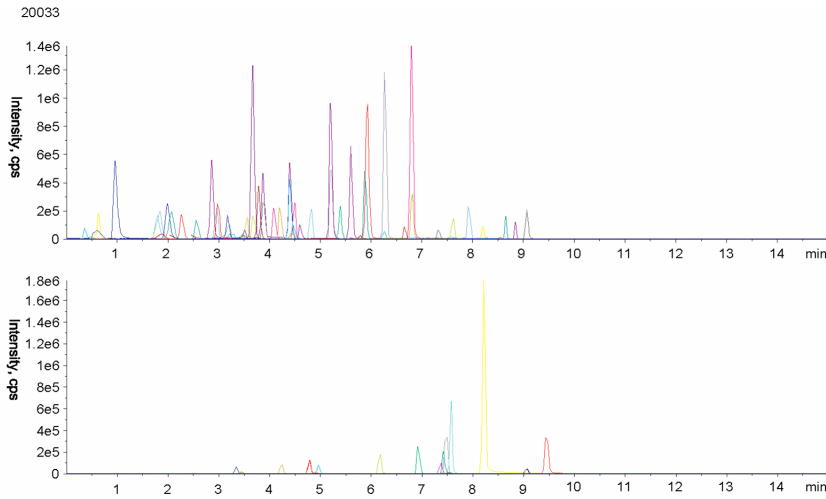
- SecurityGuard Cartridges, Gemini C18 4 x 2.0mm ID, 10/PK Part No.: AJ0-7596
- Holder Part No.: KJ0-4282



Products used in this application:



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### ANALYTES:

1 Florfenicol amine (MRM: 248.1/230.2, Positive)	41 Chlorotetracycline (MRM: 479.3/444, Positive)	81 Ibuprofen (MRM: 207.1/161.2, Positive)
2 Sulfanilamide (MRM: 173.1/92.1, Positive)	42 Sulfachloropyridazine (MRM: 285/156.1, Positive)	82 Diclofenac (MRM: 293.9/250, Positive)
3 Sulfaguanidine (MRM: 215/156.1, Positive)	43 Sulfamethoxazole (MRM: 254.1/156.1, Positive)	83 Indomethacin (MRM: 358.1/139.1, Positive)
4 Tetramisole (MRM: 205.2/178.2, Positive)	44 Florfenicol (MRM: 356.1/185, Negative)	84 Triclabendazole (MRM: 359/344.1, Positive)
5 Amoxicillin (MRM: 366.1/349.1, Positive)	45 Sulfadoxine (MRM: 311.2/156.2, Positive)	85 Tolfenamic acid (MRM: 262.1/200.1, Positive)
6 Sulfacetamide (MRM: 215.1/156.1, Positive)	46 Clindamycin (MRM: 425.4/126.1, Positive)	86 Novobiocin (MRM: 613.2/189.2, Positive)
7 Lincomycin (MRM: 407.4/126.1, Positive)	47 Tilmicosin (MRM: 435.6/695.7, Positive)	87 Niclosamide (MRM: 325/289, Positive)
8 Metronidazole (MRM: 172.1/128.1, Positive)	48 Sulfisoxazole (MRM: 268.1/156.1, Positive)	88 Decoquinatone (MRM: 418.3/344.4, Positive)
9 Dimetridazole (MRM: 142.1/96.1, Positive)	49 Carbadox (MRM: 263.1/231.1, Positive)	89 Sulfasalazine (MRM: 399.3/381.1, Positive)
10 Albendazole amino sulfone (MRM: 240.1/133.1, Positive)	50 Phenyl-2-thiouracil (MRM: 203.1/58, Negative)	90 Monensin (MRM: 693.4/675.7, Positive)
11 Ronidazole (MRM: 201.1/140.1, Positive)	51 Albendazole sulfoxide (MRM: 282.1/208.1, Positive)	91 Narasin (MRM: 787.5/531.6, Positive)
12 Minocycline (MRM: 458.2/441.3, Positive)	52 Chloramphenicol (MRM: 321.1/152, Negative)	92 Lasalocid (MRM: 613.4/377.5, Positive)
13 Sulfadiazine (MRM: 251.1/156, Positive)	53 Doxycycline (MRM: 445.2/428.3, Positive)	93 Lasalocid (MRM: 589.3/191.2, Positive)
14 Thiabendazole (MRM: 202.1/175.1, Positive)	54 Bacitracin (MRM: 712/669.6, Positive)	94 Rafoxanide (MRM: 623.9/345, Positive)
15 Sulfathiazole (MRM: 256.1/156.1, Positive)	55 2-Quinoxalinecarboxylic acid (MRM: 172.9/102, Negative)	
16 Sulfapyridine (MRM: 250.1/156.1, Positive)	56 Oxolinic acid (MRM: 262.1/244, Positive)	
17 Desethyle ciprofloxacin (MRM: 306.2/288.1, Positive)	57 Sulfadimethoxine (MRM: 311.1/156.2, Positive)	
18 Ractopamine (MRM: 302.2/107, Positive)	58 Albendazole sulfone (MRM: 298.1/266.2, Positive)	
19 Ofloxacin (MRM: 362.2/318.2, Positive)	59 Erythromycin (MRM: 734.6/158.2, Positive)	
20 Sulfamerazine (MRM: 265.1/92.2, Positive)	60 Sulfaquinoloxaline (MRM: 301.1/156.1, Positive)	
21 Enoxacin (MRM: 321.2/303.2, Positive)	61 Tylosin (MRM: 916.7/174.3, Positive)	
22 Tetracycline (MRM: 445.2/410.1, Positive)	62 Fenbendazole sulfoxide (MRM: 316.1/159.2, Positive)	
23 Norfloxacin (MRM: 320.2/276.2, Positive)	63 Josamycin (MRM: 828.7/109.1, Positive)	
24 Ampicillin (MRM: 348/207, Negative)	64 Fenbendazole sulfone (MRM: 332.1/300.2, Positive)	
25 Ciprofloxacin (MRM: 332.2/314.2, Positive)	65 Albendazole (MRM: 266.1/ 234.1, Positive)	
26 Thiamphenicol (MRM: 354/289.9, Negative)	66 Flumequine (MRM: 262.1/202.1, Positive)	
27 Lomefloxacin (MRM: 352.2/265.2, Positive)	67 Sulfanitran (MRM: 334/136, Negative)	
28 Enrofloxacin (MRM: 360.3/342.2, Positive)	68 Ceftiofur (MRM: 524/241.2, Positive)	
29 Oxytetracycline (MRM: 461.2/426.1, Positive)	69 Mebendazole (MRM: 296.1/264.1, Positive)	
30 Danofloxacin (MRM: 358.2/340.2, Positive)	70 Oxyphenbutazone (MRM: 325.2/204.2, Positive) [NSAID]	
31 Orbifloxacin (MRM: 396.2/352.3, Positive)	71 Fenbendazole (MRM: 300.1/268.1, Positive)	
32 Difloxacin (MRM: 400.2/356.3, Positive)	72 Ketoprofen (MRM: 255.1/209.2, Positive) [NSAID]	
33 Sarafloxacin (MRM: 386.3/368.1, Positive)	73 Penicillin G (MRM: 333/192.4, Negative)	
34 Sulfamethazine-d4 (MRM: 283.1/186.1, Positive)	74 Naproxen (MRM: 229/170, Negative) [NSAID]	
35 Sulfamethazine (MRM: 279.2/92.1, Positive)	75 Phenylbutazone (MRM: 309.2/160.2, Positive) [NSAID]	
36 2-mercaptobenzimidazole (MRM: 151.2/93, Positive)	76 Flunixin (MRM: 295.1/191, Negative)	
37 Sulfamethizole (MRM: 271.2/156.1, Positive)	77 Nicarbazin (MRM: 301/107.1, Negative)	
38 Iprnidazole-OH (Hydroxy-ipronidazole) (MRM: 178.1/168.1, Positive)	78 Ibuprofen (MRM: 286.1/242.1, Negative) [NSAID]	
39 Sulfamethoxy-pyridazine (MRM: 281.1/155.9, Positive)	79 Pyprone (MRM: 310/191.1, Negative) [NSAID]	
40 Spiramycin (MRM: 422.5/174.1, Positive)	80 Cloxacillin (MRM: 434.1/292.9, Negative)	

