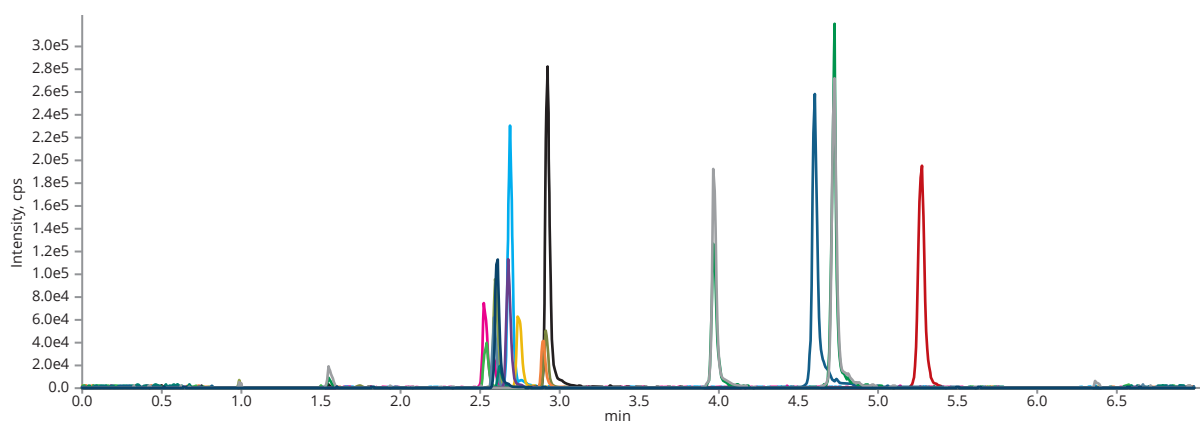


## Quinolones

A Quinolone antibacterials are drugs used in veterinary medicine to treat bacterial infections. The analysis of residual amounts of drugs in food is important for monitoring the quality control of products of animal origin.

This application clearly shows the separation of 16 quinolones using the LC/MS technique.

Substance	Quinolone antibiotic (see the table MS conditions)
-----------	--



*Quinolones in muscle on ARION® UHPLC column*



## Quinolones

### UHPLC conditions

<b>Column</b>	Arion® Plus C18, 1.7 µm		
<b>Dimensions</b>	100 mm × 2.1 mm		
<b>Part number</b>	ARI-5720-BI21		
<b>Mobile phase</b>	0.1% Formic acid in ACN / 0.1% formic acid in water (A / B)		
<b>Gradient elution</b>	<b>Retention (min)</b>	<b>%A</b>	<b>%B</b>
	0	10	90
	3	51	49
	4	50	50
	5	49	51
	5.5	48	52
	5.6	10	90
	7	10	90
<b>Flow rate</b>	0.3 ml/min		
<b>Temperature</b>	30 °C		
<b>Detection</b>	LC-MS/MS (Dionex UltiMate 3000 UHPLC / AB SCIEX QTRAP 5500)		
<b>Injection volume</b>	10 µl		
<b>Analytes</b>	Quinolones listed in the table MS conditions		



## Quinolones

### MS conditions

Analyte	Retention time (min)	Precursor (m/z)	CAS Number
Enoxacin	2.54	321.0	74011-58-8
Marbofloxacin	2.55	362.9	115550-35-1
Norfloxacin	2.60	320.0	70458-96-7
Ofloxacin	2.61	361.9	82419-36-1
Fleroxacin	2.62	370.0	79660-72-3
Ciprofloxacin	2.64	332.0	85721-33-1
Lomefloxacin	2.69	351.9	98079-51-7
Danofloxacin	2.70	358.0	112398-08-0
Enrofloxacin	2.76	360.0	93106-60-6
Sarafloxacin	2.91	386.0	98105-99-8
Sparfloxacin	2.93	392.9	110871-86-8
Difloxacin	2.94	400.0	98106-17-3
Oxolinic acid	3.97	262.0	14698-29-4
Nalidixic acid	4.60	232.9	389-08-2
Flumequine	4.72	261.9	42835-25-6
Cinchophen	5.27	250.0	132-60-5