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Nalidixic Acid Antibiotics: SunFire Intelligent Speed Separation

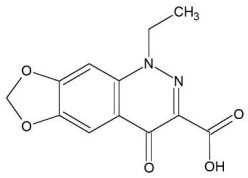
Waters Corporation

Abstract

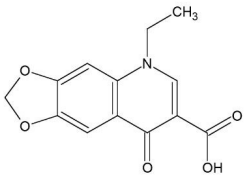
This application brief highlight the SunFire *IS* Column separation of antibiotics using MS detection.

Introduction

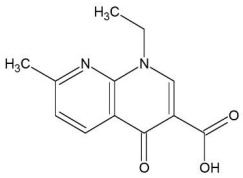
Compounds used in this study are shown below.



Cinoxacin



Oxolinic acid



Nalidixic acid

Experimental

Conditions

Column:	SunFire C_{18} 2.1 x 20 mm *IS*, 3.5 µm (p/n: 186002531)
Mobile phase A:	Water
Mobile phase B:	MeOH
Mobile phase C:	1.0 % HCOOH in water
Flow rate:	0.4 mL/min
Injection volume:	2 µL
Sample concentration:	10 µg/mL in 50:50 Acetonitrile/ water
Temperature:	30 °C

Instrument:	Waters AutoPurification System

Gradient

Time (min)	Profile		
	%A	%B	%C
0.0	60	30	10
2.0	40	50	10
3.0	60	30	10
5.0	60	30	10

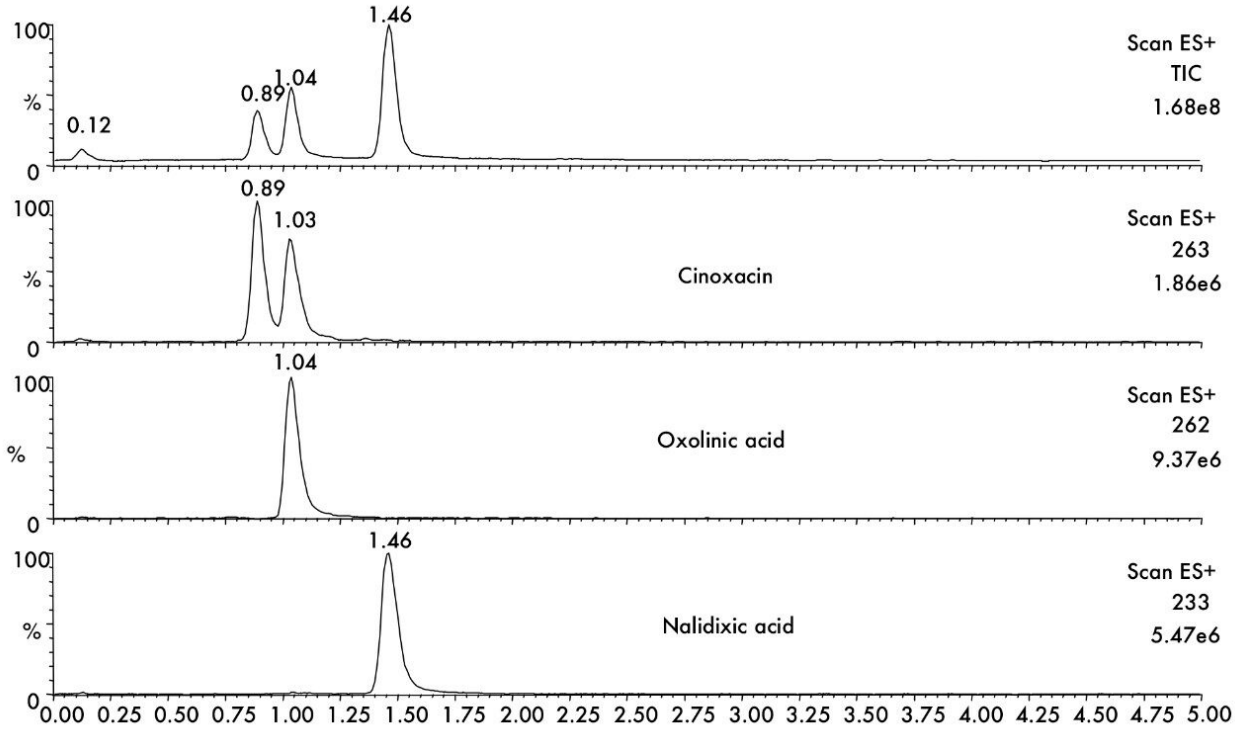
ZQ Conditions

ES+

Capillary (kV):	3.5
Cone (V):	50
Extractor:	3
RF Lens:	0.1
Source temp. (oC):	150
Desolvation temp. (oC):	400
Cone Gas Flow (L/Hr):	50
Desolvation Gas Flow (L/Hr):	500

LM resolution:	15
HM Rrsolution:	15
Ion energy:	0.5
Multiplier (V):	650

Results and Discussion



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