

NALIDIXIC ACID ANTIBIOTICS BY LC/MS

2.0 minute gradient, 2.1 x 20 mm *IS*TM Separation

CONDITIONS

Column: AtlantisTM dC₁₈, 2.1 x 20 mm *IS*TM, 3.0 µm, (P/N: 186002058)
 Mobile Phase A: Water
 Mobile Phase B: Methanol
 Mobile Phase C: 1% HCOOH in Water
 Flow Rate: 0.4 mL/min
 Gradient:

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

 Injection Volume: 2 µL
 Sample concentration: 10 µg/mL
 Temperature: 30°C
 Instrument: Alliance[®] 2795 and Waters ZQ[™]

MS CONDITIONS

Waters ZQ[™]
 ES+
 Capillary (kV) 3.5
 Cone (V) 5.0
 Extractor 3.0
 RF Lens 0.1
 Source Temp (°C) 150
 Desolvation Temp (°C) 400
 Cone Gas Flow (L/Hr) 50
 Desolvation Gas Flow(L/Hr) 500
 LM Resolution 15
 HM Resolution 15
 Ion Energy 0.5
 Multiplier (V) 650

Compounds MW
 1. Cinoxacin 262.2
 2. Oxolinic Acid 261.2
 3. Nalidixic Acid 232.2

The top figure is the total ion current, followed by the extracted ion signals for each of the three analytes.

*The "extra" peak in the cinoxacin panel is the isotope from oxolinic acid.

