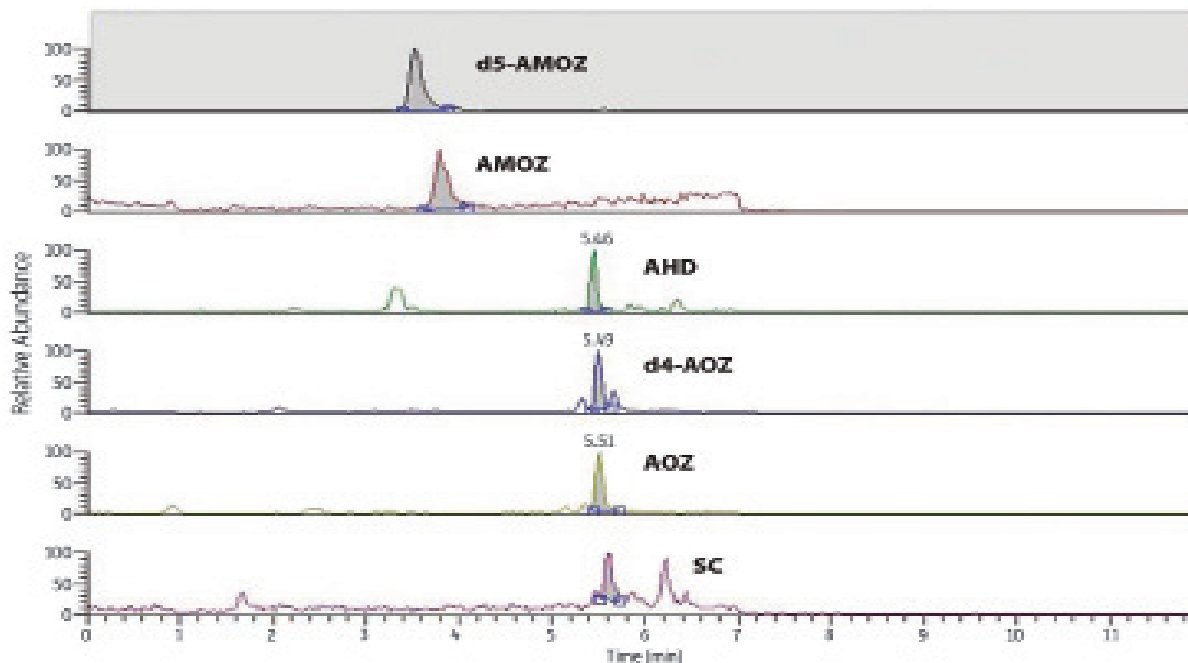


Nitrofuran Metabolites by LC-MS/MS on an Ultra C18 Column



LC_0323

Column: Ultra C18
Cat. #: 9174312
Dimensions: 100 x 2.1mm
Particle Size: 3µm
Pore Size: 100Å

Conditions:
Mobile Phase: A: 0.05% formic acid in methanol
B: 0.05% formic acid – 5 mM NH₄ formate in water

Time (min)	%B
0	90
2.5	90
5	10
10	10
12	90
15	90

Flow: 200µL/min.
Temp.: 30°C
Det.: MS/MS triple quadrupoles (Thermo Finnigan Discovery)

Peak List:	Conc. (ppb)	Time (min)
1. d5-AMOX	0.3	3.7
2. AMOX	0.3	3.8
3. AHD	0.3	5.46
4. d4-AOX	0.3	5.49
5. AOX	0.3	5.51
6. SC	0.3	5.6

Sample: honey extract with 0.3ppb nitrofurantoin metabolites
Inj.: 10 µL
Conc.: 0.3ppb each metabolite
Sample Diluent: 50:50 0.05% formic acid in methanol:0.05% formic acid – 5mM NH₄ formate in water
Sample Temp.: 20°C

Analyzer Parameters:
Ion Source: ESI (electrospray ionization)
Only Segment: 15 min.
Polarity: positive
Data Type: centroid
Scan Mode: SRM product
Scan Width (m/z): 0.7
Scan Time (s): 0.25
Peak Width: Q1: within 0.7
Q2: 0.7

Collision Gas
Pressure (mTorr): 1.5 (argon)
Divert Valve: active, with 3 positions
Positions-1° 2 min., 2° 8 min., 3° 5 min.

Analyte	Prec. Ion	Prod. Ion	Collision E	Tube Lens
AOZ	236	134	12 V	120
AMOX	335	291	10 V	100
SC	209	166	12 V	80
AHD	249	134	12 V	110

AMOX = 3-amino-5-morpholinomethyl-2-oxazolidinone
AHD = 1-aminohydantoin hydrochloride
AOZ = 3-amino-2-oxazolidinone
SC = semi carbazide