

粮食中 16 种真菌毒素分离

化合物名称&浓度 (ppb)

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
AFB1	10.830	5.415	2.708	1.083	0.541	0.271
AFB2	3.02	1.51	0.755	0.302	0.151	0.075
AFG1	10.17	5.085	2.543	1.017	0.508	0.254
AFG2	3.06	1.53	0.765	0.306	0.153	0.076
NIV	4000	2000	1000	400	200	100
DON	1500	750	375	150	75	37.5
DON-3G	250	125	62.5	25	12.5	6.25
3-AcDON	400	200	100	40	20	10
15-AcDON	200	100	50	20	10	5
ZEN	200	100	50	20	10	5
OTA	20	10	5	2	1	0.5
T-2	20	10	5	2	1	0.5
HT-2	100	50	25	10	5	2.5
ST	10	5	2.5	1	0.5	0.25
FB1	200	100	50	20	10	5
FB2	100	50	25	10	5	2.5

色谱&质谱条件:

HPLC-conditions Thermo Scientific™ Dionex Ultimate 3000

Injection mode: Normal

Injection volume: 10 µL/20 µL

Column oven (T): 40 °C

Column: Hypersil Gold aQ 100 x 2.1 mm, 1.9 µm

Run time: 16 min

A: 5 mM NH₄Ac + 0.5% acetic acid in water

B: 5 mM NH₄Ac + 0.5% acetic acid in methanol

Time [min]	A	B	flow rate [mL/min]
0	100	0	0.4
1	100	0	0.4
3	80	20	0.4
4.5	50	50	0.4
6.5	50	50	0.4
7	45	55	0.4
10	0	100	0.4
10.1	0	100	0.5
13	0	100	0.5
13.1	100	0	0.4
16	100	0	0.4

MS Parameters (Thermo Scientific™ TSQ Endura MS/MS)

Ion Source type: HESI

Detection Mode: t-SRM

Spray voltage positive: 3500 V

Spray voltage negative: 2500 V

Sheath gas: 45

Aux gas: 15

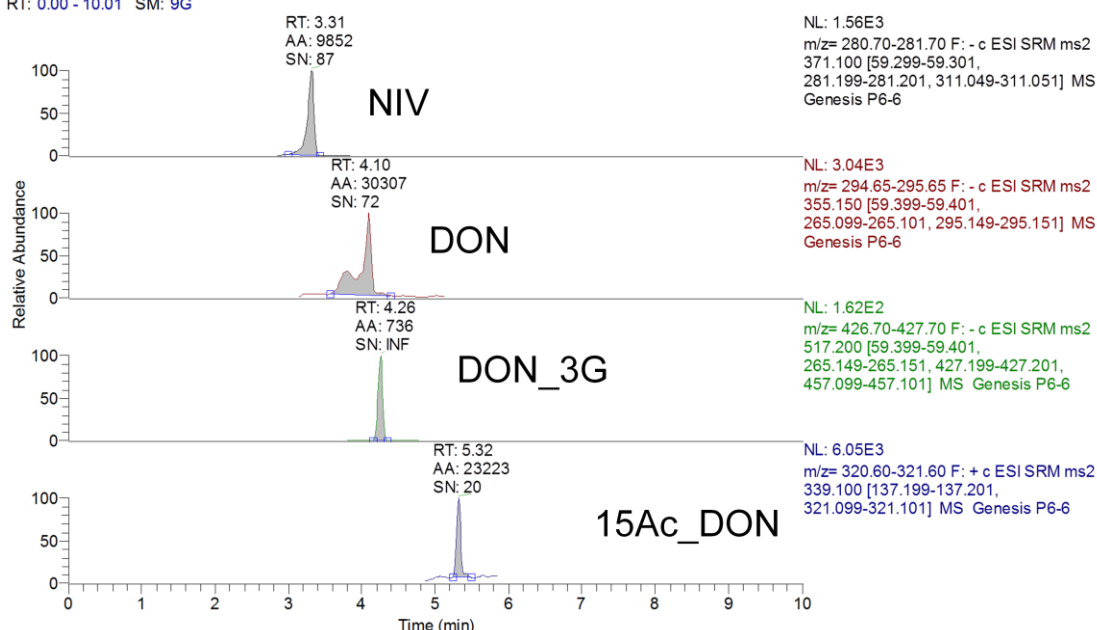
Sweep gas: 1

Ion transfer tube (T): 340 °C

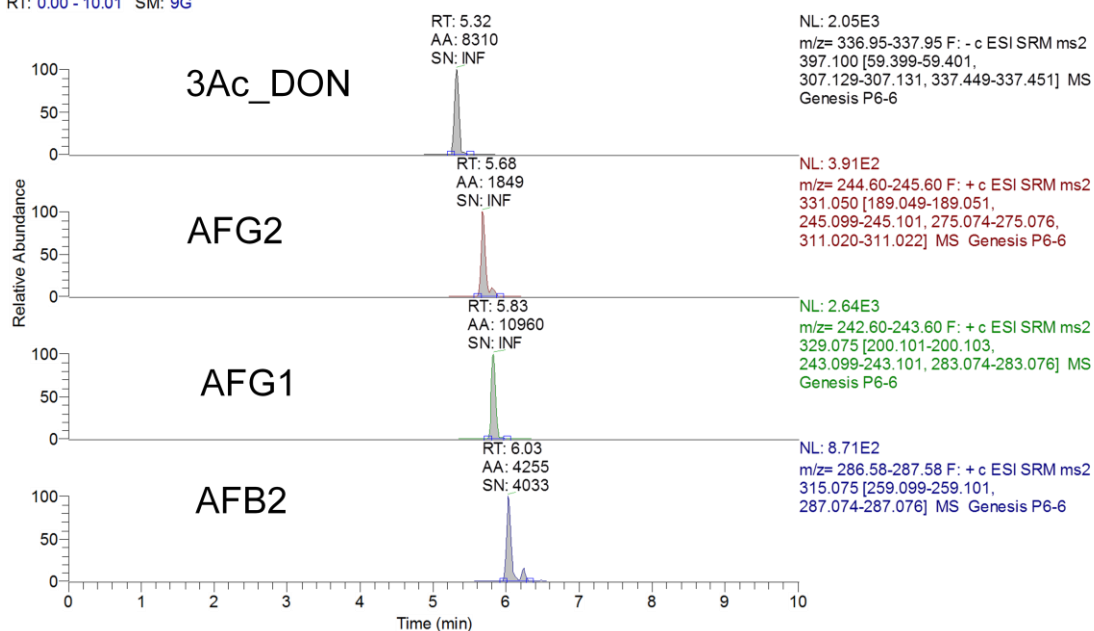
Vaporizer (T): 350 °C

图谱:

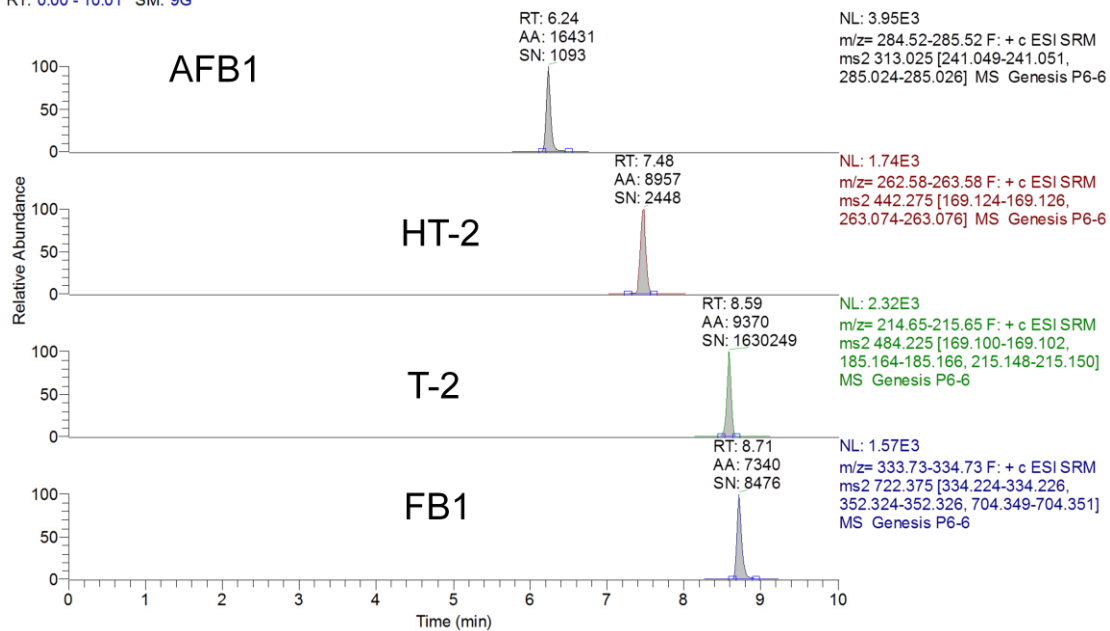
RT: 0.00 - 10.01 SM: 9G



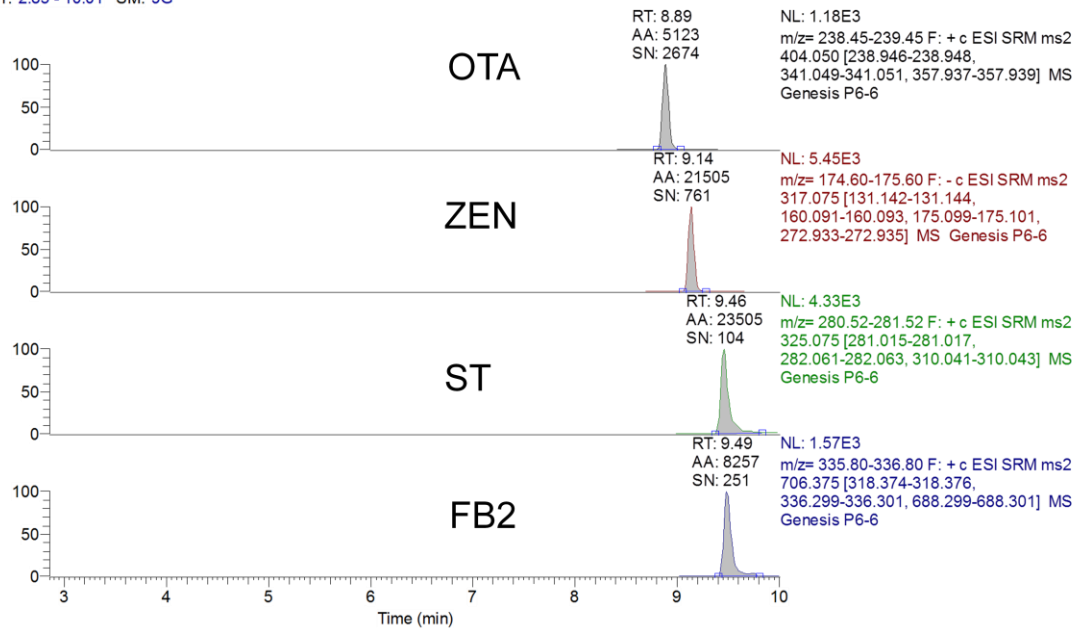
RT: 0.00 - 10.01 SM: 9G



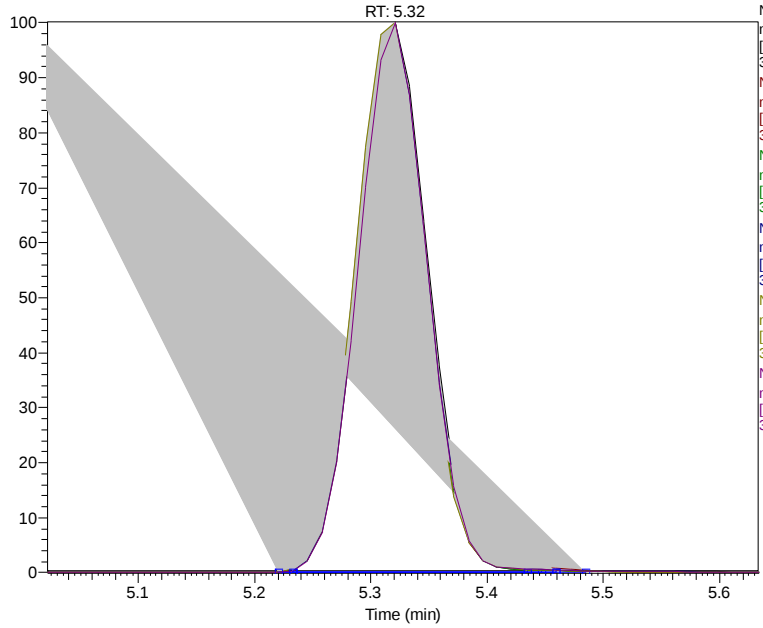
RT: 0.00 - 10.01 SM: 9G



RT: 2.85 - 10.01 SM: 9G

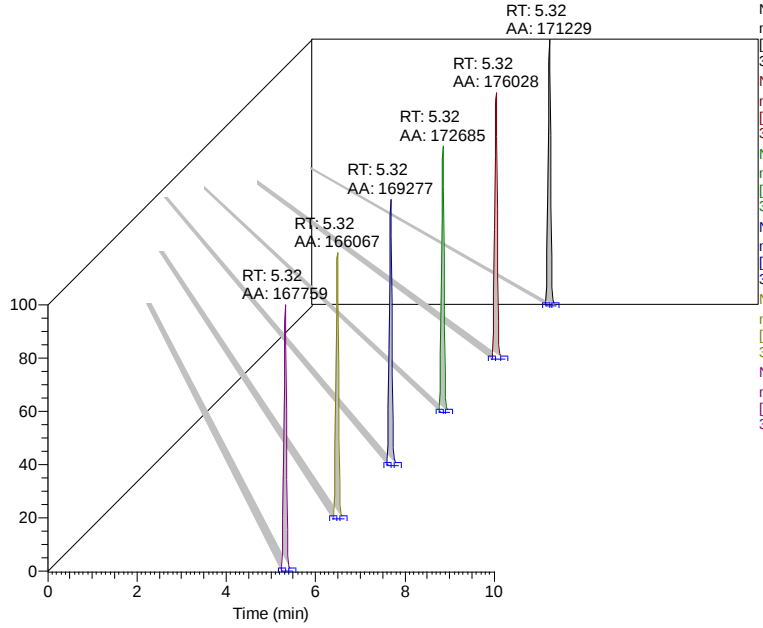


RT: 5.02 - 5.63 SM: 9G



NL: 4.09E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis P2-1
NL: 4.15E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-2
NL: 4.17E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-3
NL: 4.05E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-4
NL: 3.95E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-5
NL: 4.08E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-6

RT: 0.00 - 10.02 SM: 9G



NL: 4.09E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis P2-1
NL: 4.15E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-2
NL: 4.17E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-3
NL: 4.05E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-4
NL: 3.95E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-5
NL: 4.08E4
m/z= 336.95-337.95 F: - c ESI SRM ms2 397.100
[59.399-59.401, 307.129-307.131,
337.449-337.451] MS Genesis p2-6