

Cereal based Food - Multi-toxin quantification of Aflatoxins, Ochratoxin A, Trichothecenes, Zearalenone

Column: Kinetex® 2.6 µm C18 100 Å, LC Column 100 x 2.1 mm, Ea
Dimensions: 100 x 2.1 mm ID
Order No: 00D-4462-AN
Elution Type: Gradient
Eluent A: Water with 0.5% Acetic acid and 1mM Ammonium acetate
Eluent B: Methanol with 0.5% Acetic acid and 1mM Ammonium acetate
Gradient Profile:

Step No.	Time (min)	Pct A	Pct B
1	0	90	10
2	4	60	40
3	31	40	60
4	36	40	60

Flow Rate: 200 µL/min

Col. Temp.: 40 °C

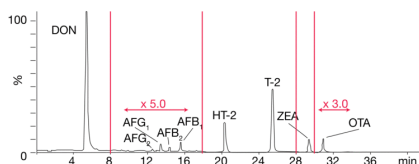
Detection: Tandem Mass Spec (MS-MS) @ (350 °C)

Detector Info: Vertical lines indicate periods ion source polarity switching

20928

Authors reference:

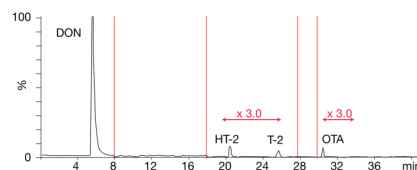
Michele Suman - michele.suman@barilla.com
 Barilla Food Research Labs, via Mantova 166, 43100 Parma, Italy



Total ion chromatogram (sum of MRM transitions) of a wheat based crisp bread sample extract spiked with:

750 µg/kg DON; 1 µg/kg AFG2, AFB2; 3 µg/kg AFG1;
 5 µg/kg AFB1; 50 µg/kg HT-2, T-2; 75 µg/kg ZEA;
 3 µg/kg OTA

Veronica M. T. Lattanzio - veronica.lattanzio@ispa.cnr.it
 Institute of Sciences of Food Production (ISPA), National Research Council of Italy (CNR), via Amendola 122/o, 70126 Bari, Italy.



Chromatograms (MRM transitions) of flour naturally contaminated with-

[top] 898 µg/kg DON; 9 µg/kg HT2; 2 µg/kg T2;
 6 µg/kg OTA (soft wheat)
 [down] 5.3 µg/kg DON; 5.4 µg/kg HT2; 1.5 µg/kg T2; 0.8 µg/kg OTA
 (durum wheat)

ANALYTES:

- 1 Deoxynivalenol**
Retention Time: 4.8 min
- 2 Aflatoxin G2**
Retention Time: 12.8 min
- 3 Aflatoxin G1**
Retention Time: 13.6 min
- 4 Aflatoxin B2**
Retention Time: 14.6 min
- 5 Aflatoxin B1**
Retention Time: 15.8 min
- 6 HT-2**
Retention Time: 20.1 min
- 7 T2-Toxin**
Retention Time: 25.3 min
- 8 Zearalenone**
Retention Time: 29 min
- 9 OCHRATOXIN A**
Retention Time: 31.4 min

©2025 Phenomenex Inc. All rights reserved.

For more information contact your Phenomenex Representative at support@phenomenex.com



Phenomenex products are available worldwide.

www.phenomenex.com

support@phenomenex.com