

Rapid, Reliable, and Amazing LC Columns for

Food Testing



 **phenomenex**[®]
...breaking with traditionSM



www.phenomenex.com/LCFOOD

Liquid Chromatography Columns to Fit Your Need

Whether you're testing Mycotoxins, Veterinary Drugs, Pesticides, Simple Sugars, PFAS or Natural Products, analysis for Food Testing requires a range of phase selectivities and reliable LC columns.



Application Selection and Column Recommendations

Mycotoxins from Grain

Kinetex® C18

Pesticides from Kale

Kinetex Biphenyl

Fipronil, Amitraz, and Metabolites from Eggs

Kinetex Polar C18

PFAS from Milk, Eggs, and Butter

Luna® Omega PS C18

Mitragynine and 7-Hydroxy (7-OH)
Mitragynine from Dietary Supplements

Kinetex EVO C18

Simple Sugars from Beverages

Luna Omega SUGAR

Neonicotinoids from Honey

Kinetex Biphenyl

Antibiotics from Ground Meat

Kinetex XB-C18

Find more applications and complete method details at
www.phenomenex.com/FOOD

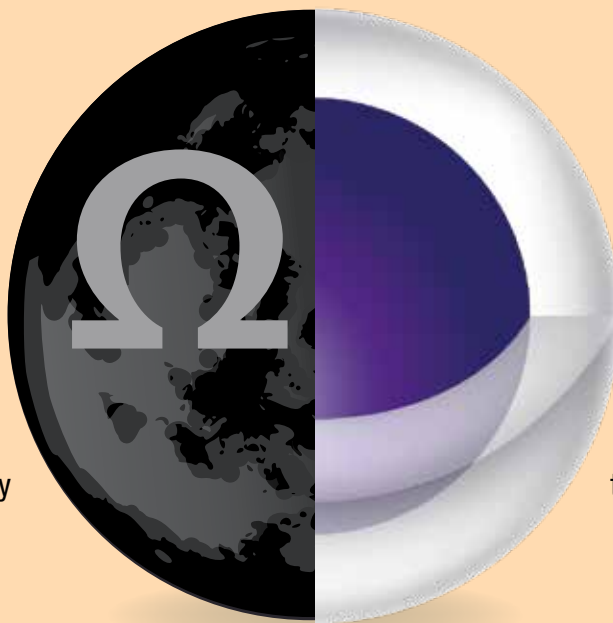
Ultimate HPLC/UHPLC Combo

Gain Incredible Performance, Versatile Selectivities
and Upgraded Throughput



Cutting Edge Fully Porous Silica Particle

Luna is one of the most recognized HPLC brands on the market, delivering high efficiency, ruggedness, reproducibility, and dependability for a wide range of analyses.

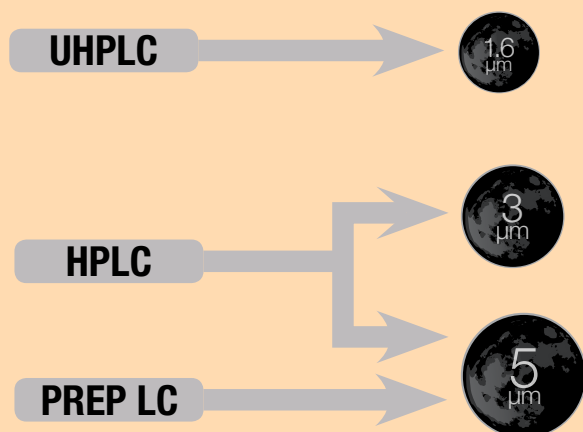


The Chosen Core-Shell Brand

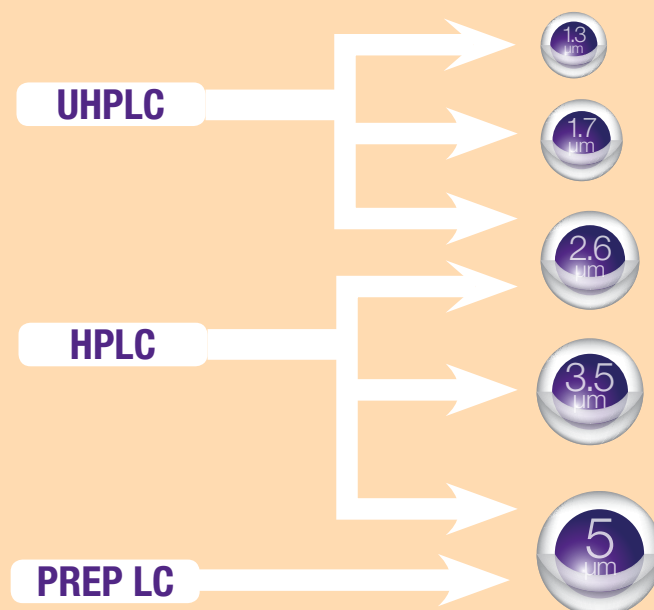
Kinetex Core-Shell Technology delivers dramatic improvements in efficiency over conventional fully porous media which can be leveraged to increase resolution, greatly improve productivity, reduce solvent consumption and decrease costs.

Complete Scalable Solution from UHPLC to HPLC to PREP LC

Luna Omega Particle Selection



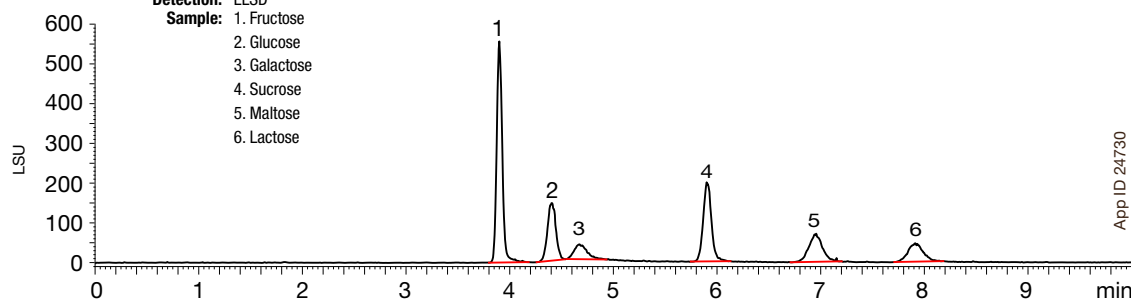
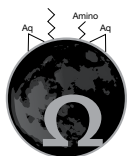
Kinetex Core-Shell Particle Selection



Simple Sugars Analysis

LC-ELSD Conditions

Column: Luna Omega 3 μ m SUGAR
Dimension: 150 x 4.6 mm
Part No.: 00F-4775-E0
Mobile Phase: Acetonitrile/Water (75:25)
Flow Rate: 1 mL/min
Injection Volume: 5 μ L
Temperature: 40 $^{\circ}$ C
Detection: ELSD
Sample: 1. Fructose
2. Glucose
3. Galactose
4. Sucrose
5. Maltose
6. Lactose



PFAS from Milk, Eggs, and Butter

LC-MS/MS Conditions

Column: Luna Omega 1.6 μ m PS C18
Dimensions: 100 x 2.1 mm
Part No.: 00D-4752-AN
Mobile Phase: A: 5 mM Ammonium Acetate in Water
B: Acetonitrile

Gradient: Time (min) % B
0 40
0.5 40
3 90
3.1 100
4 100

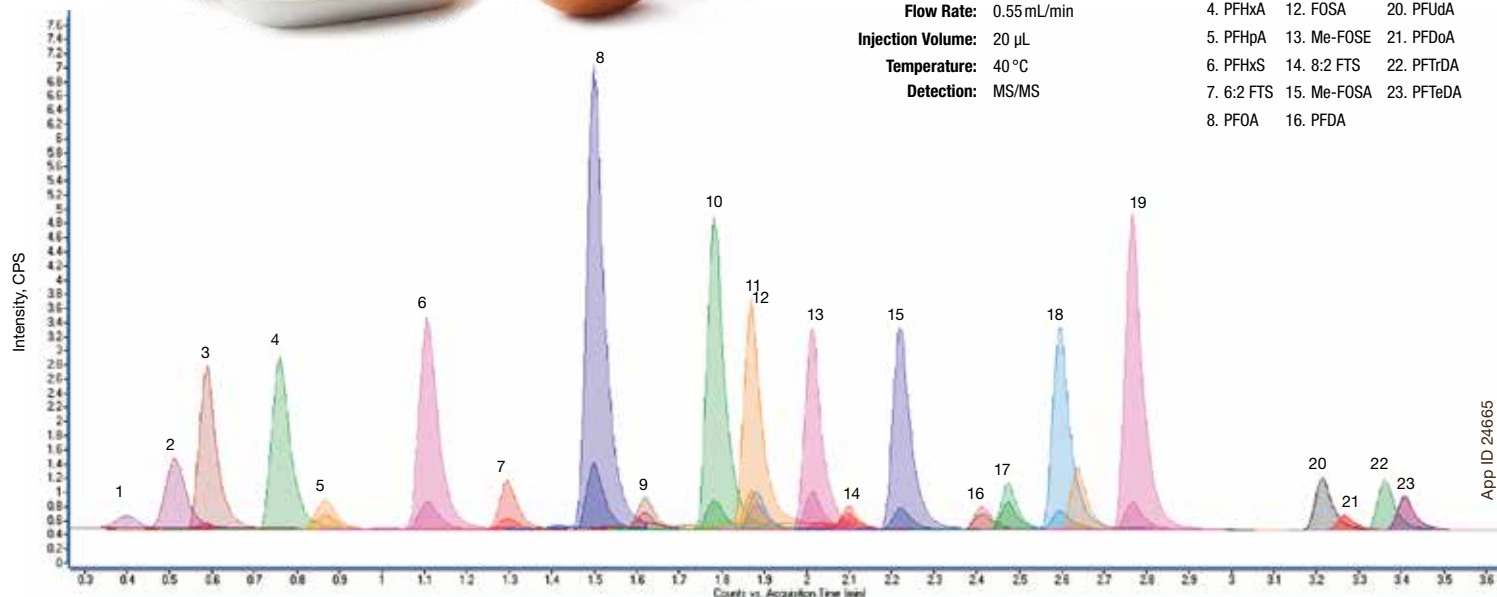
Flow Rate: 0.55 mL/min

Injection Volume: 20 μ L

Temperature: 40 $^{\circ}$ C

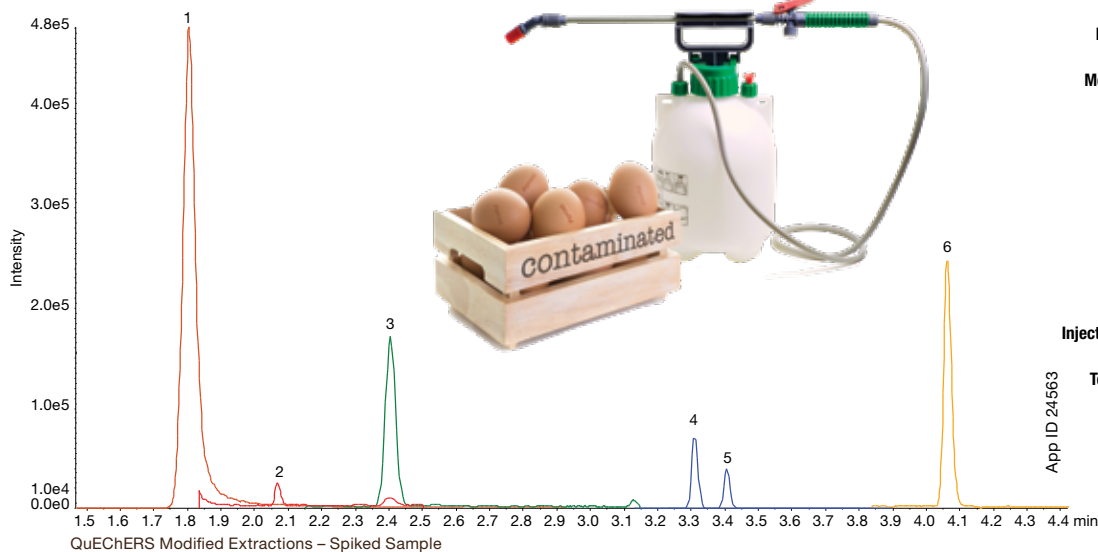
Detection: MS/MS

Analytes: 1. PFBA 9. PFHpS 17. Et-FOSE
2. PFPeA 10. PFOS 18. Et-FOSA
3. PFBS 11. PFNA 19. PFDS
4. PFHxA 12. FOSA 20. PFUdA
5. PFHpA 13. Me-FOSE 21. PFDaA
6. PFHxS 14. 8:2 FTS 22. PFTriDA
7. 6:2 FTS 15. Me-FOSA 23. PFTeDA
8. PFOA 16. PFDA



Your Daily Challenges

Fipronil, Amitraz, and Metabolites from Eggs



LC-MS/MS Conditions

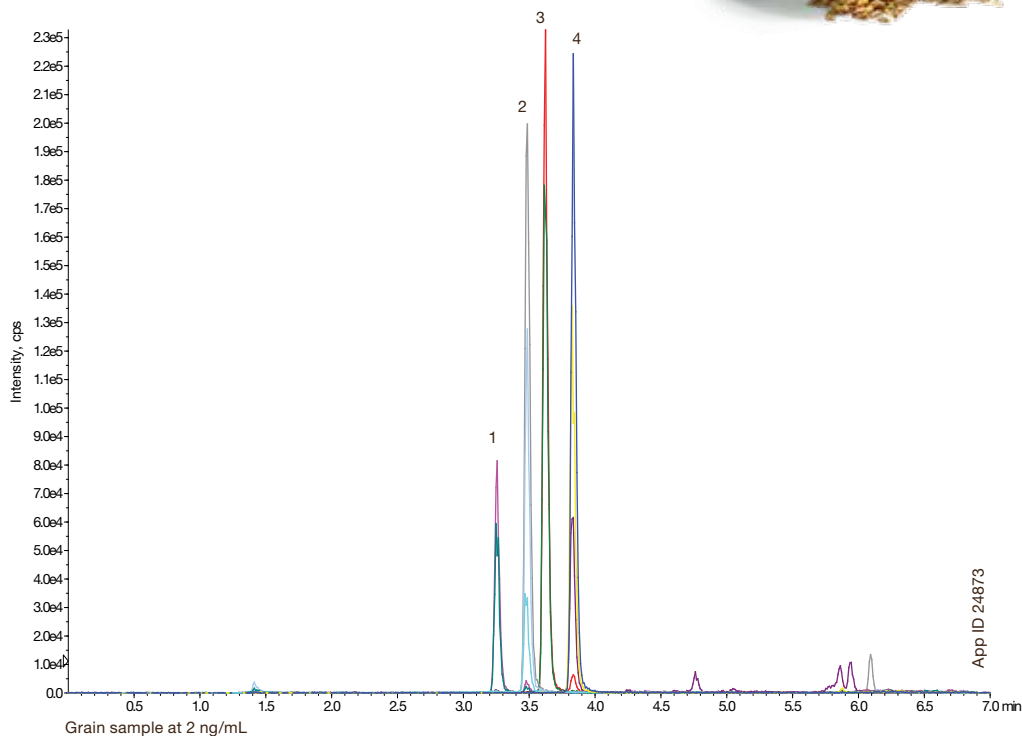
Column: Kinetex 2.6 μ m Polar C18
Dimensions: 100 x 2.1 mm
Part No.: OOD-4759-AN
Mobile Phase: A: 5 mM Ammonium Formate in Water
B: 5 mM Ammonium Formate in Methanol + 0.05% Formic Acid
Gradient:

Time (min)	% B
0	5
0.5	5
1.5	40
3	80
5	87
5.5	95
5.6	5
7	5

Injection Volume: 5 μ L
Flow Rate: 0.9 mL/min
Temperature: 40 $^{\circ}$ C
Detection: MS/MS
Detector: SCIEX QTRAP[®] 6500+ with IonDrive
Pos/Neg switching
System: SCIEX ExionLC[™]
Analytes:

Analyte	RT (min)
1. DPMF	1.8
2. DMA	2.08
3. DMF	2.39
4. Fipronil	3.30
5. Fipronil Sulfone	3.39
6. Amitraz	4.05

Aflatoxins from Grain



LC-MS/MS Conditions

Column: Kinetex 1.7 μ m C18
Dimensions: 100 x 3.0 mm
Part No.: OOD-4475-YO
Guard Column: SecurityGuard[™] ULTRA Cartridges
Part No.: AJ0-8775
Mobile Phase: A: 5 mM Ammonium Acetate in Water
B: Acetonitrile/Methanol (50:50)
Gradient:

Time (min)	% B
0.01	40
0.5	40
3	70
4	70
4.2	100
5	100
5.01	40
7	40

Flow Rate: 0.3 mL/min
Col. Temp.: 40 $^{\circ}$ C
Inj. Volume: 10 μ L
Detector: SCIEX Triple Quad[™] 4500, ESI+
Detection: MS/MS
Analytes:

1. Aflatoxin G ₂
2. Aflatoxin G ₁
3. Aflatoxin B ₂
4. Aflatoxin B ₁

Explore Your LC Options

Kinetex HPLC/UHPLC Columns



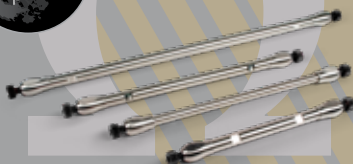
KINETEX
Core-Shell Technology



Find Your Column and Order Now.

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Luna Omega HPLC/UHPLC Columns



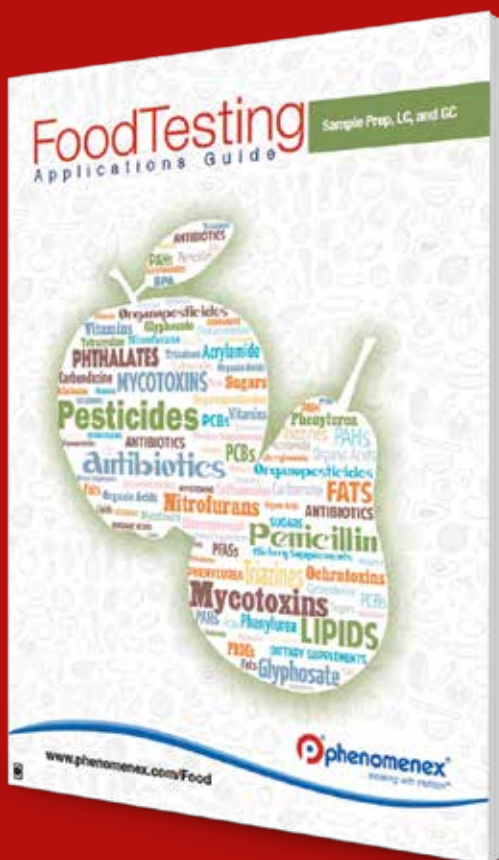
Find Your Column and Order Now.

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guarantee

If Phenomenex products in this guide do not provide at least an equivalent separation as compared to other products of the same phase and dimensions, return the product with comparative data within 45 days for a FULL REFUND.

Comprehensive Food Testing Guide



**Access Over 150
Food Applications
Using Sample Prep,
LC, and GC**

www.phenomenex.com/FTGuide

Rapid, Reliable, and Amazing LC Columns for Food Testing

Australia

t: +61 (0)2-9428-6444
auinfo@phenomenex.com

Austria

t: +43 (0)1-319-1301
anfrage@phenomenex.com

Belgium

t: +32 (0)2 503 4015 (French)
t: +32 (0)2 511 8666 (Dutch)
beinfo@phenomenex.com

Canada

t: +1 (800) 543-3681
info@phenomenex.com

China

t: +86 400-606-8099
cninfo@phenomenex.com

Denmark

t: +45 4824 8048
nordicinfo@phenomenex.com

Finland

t: +358 (0)9 4789 0063
nordicinfo@phenomenex.com

France

t: +33 (0)1 30 09 21 10
franceinfo@phenomenex.com

Germany

t: +49 (0)6021-58830-0
anfrage@phenomenex.com

India

t: +91 (0)40-3012 2400
indiainfo@phenomenex.com

Ireland

t: +353 (0)1 247 5405
eireinfo@phenomenex.com

Italy

t: +39 051 6327511
italiainfo@phenomenex.com

Luxembourg

t: +31 (0)30-2418700
nlinfo@phenomenex.com

Mexico

t: 01-800-844-5226
tecnicomx@phenomenex.com

The Netherlands

t: +31 (0)30-2418700
nlinfo@phenomenex.com

New Zealand

t: +64 (0)9-4780951
nzinfo@phenomenex.com

Norway

t: +47 810 02 005
nordicinfo@phenomenex.com

Portugal

t: +351 221 450 488
ptinfo@phenomenex.com

Singapore

t: +65 800-852-3944
sginfo@phenomenex.com

Spain

t: +34 91-413-8613
espinfo@phenomenex.com

Sweden

t: +46 (0)8 611 6950
nordicinfo@phenomenex.com

Switzerland

t: +41 61 692 20 20
swissinfo@phenomenex.com

United Kingdom

t: +44 (0)1625-501367
ukinfo@phenomenex.com

USA

t: +1 (310) 212-0555
info@phenomenex.com

**All other countries
Corporate Office USA**

t: +1 (310) 212-0555
info@phenomenex.com

**www.phenomenex.com**

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