

New
Luna Omega
1.6 μm UHPLC
Columns



**The Final Word in
Fully Porous UHPLC**

explore

LUNA[®]



phenomenex[®]
...breaking with traditionSM



Enhanced with 20 Years of Technology, Innovation, and Experience

One of the world's leading HPLC brands, now enhanced for incredible UHPLC performance! Luna Omega 1.6 μm UHPLC columns culminate 20 years of technological prowess, advancements, and innovation from Phenomenex!

With **astounding efficiency levels**, highly **versatile selectivities**, and **trusted accuracy**, Luna Omega columns will take your UHPLC experience to a new level.



Luna® Omega UHPLC columns
will boost your UHPLC instrumentation!



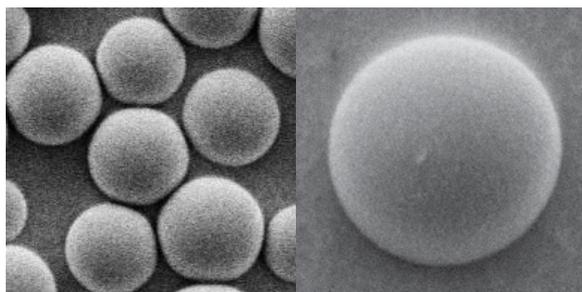
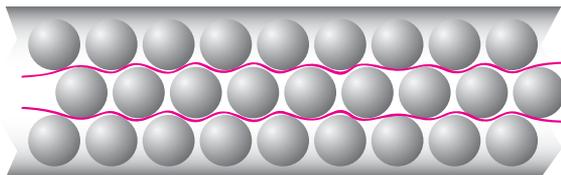
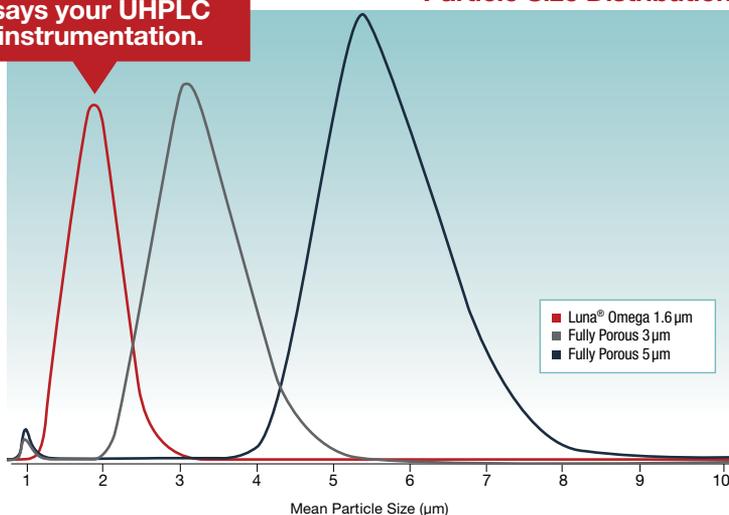


Cutting-Edge 1.6 μm Silica Particle

Exceptionally tight particle size distribution in combination with a constant particle morphology and rugged chemical architecture results in amazing column packing efficiencies, steady selectivity, and excellent reproducibility.

**“Yes please!”,
says your UHPLC
instrumentation.**

Particle Size Distribution



Luna Omega Material Characteristics

Phase	C18
Particle Size	1.6 μm
Pore Size	100 Å
pH Range	1.5 - 8.5*
Surface Area	260 m^2/g
Pressure Limit	1000 bar
USP Listing	L1

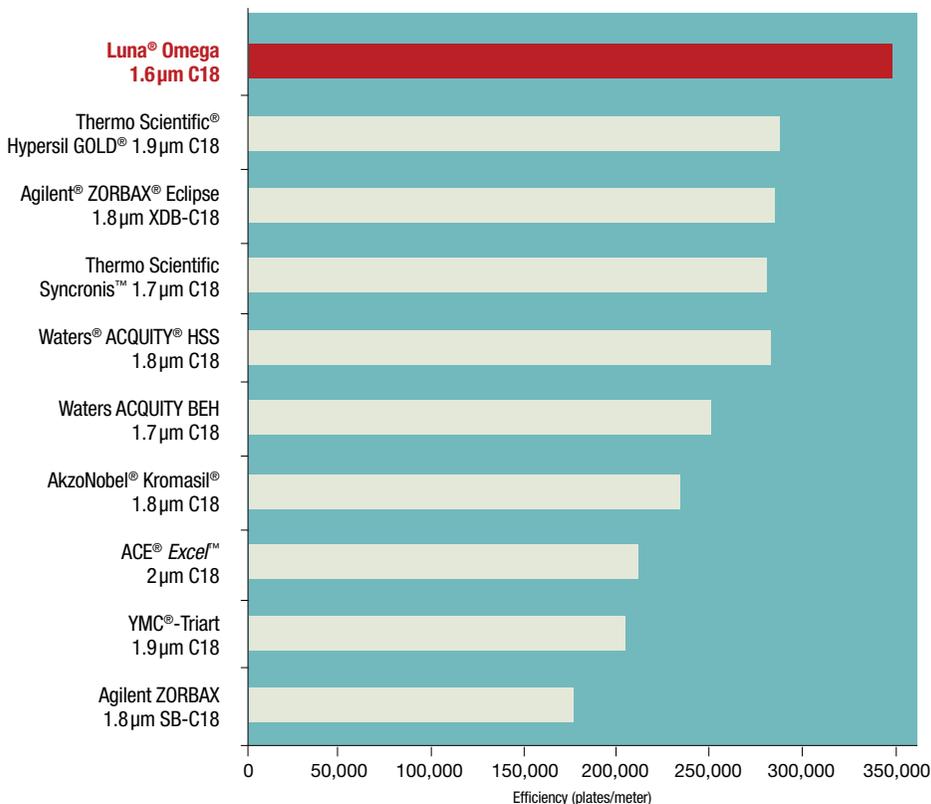
*pH stability under gradient conditions. pH stability is 1.5-10 under isocratic conditions.



Astounding Performance

The undeniably high efficiency levels found in each Luna Omega UHPLC column provide you with the potential of huge gains in method performance. While traditional silica and hybrid fully porous particles claim high performance, when compared to Luna Omega 1.6 μm , they drastically fall short and prevent UHPLC scientists from reaching UHPLC climax.

UHPLC Efficiency Comparison



Conditions for all columns:

Dimension: 50 x 2.1 mm

Mobile Phase: Acetonitrile/Water (65:35)

Flow Rate: 0.5 mL/min

Temperature: Ambient

Detection: UV @ 254 nm

System: ACQUITY UPLC®

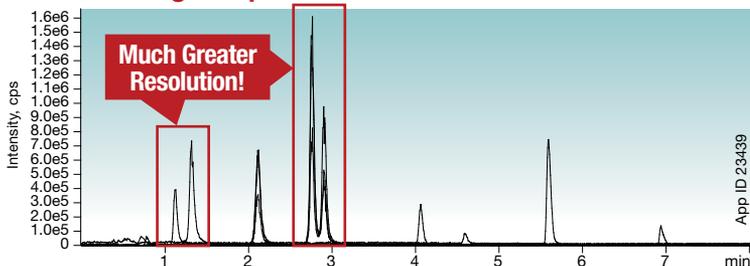
Comparative separations may not be representative of all applications.



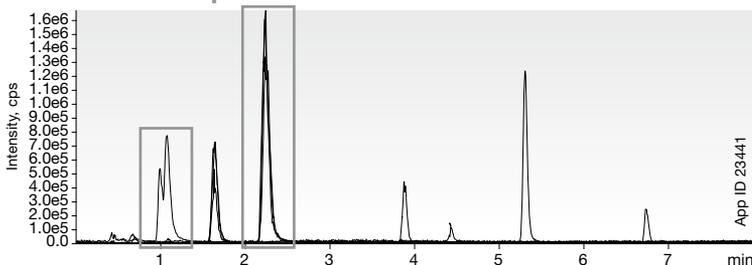
Separation Muscle

Our industry leading bonding technologies in conjunction with high efficiency levels ensure excellent stationary phase coverage and improved separation power. Now, with Luna Omega 1.6 μ m, you can turn difficult separations into resolution achievements.

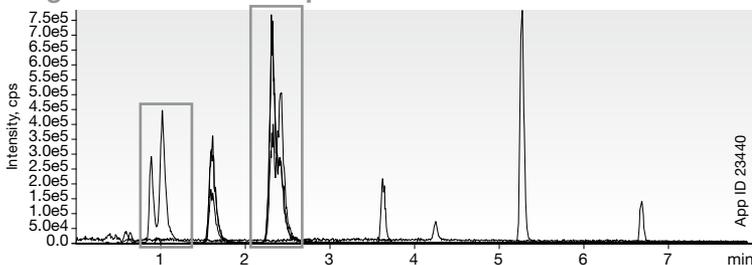
Luna[®] Omega 1.6 μ m C18



ACE[®] Excel[™] 2 μ m C18-AR



Agilent[®] ZORBAX[®] 1.8 μ m XDB-C18



Conditions for all columns:

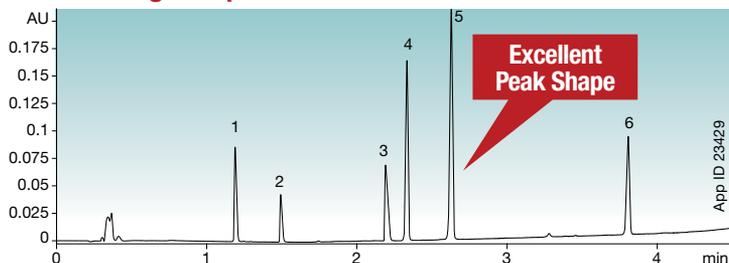
Columns: Luna Omega 1.6 μ m C18 ZORBAX 1.8 μ m XDB-C18 ACE Excel 2 μ m C18-AR	Gradient: Time (min) 0 7	% B 3 90	Sample: 1. Succinic acid 2. MMA 3. Glutaric acid 4. Methylsuccinate 5. Ethylmalonic acid 6. Hippuric acid 7. Homovanillic acid 8. Suberic acid
Dimension: 50 x 2.1 mm	Flow Rate: 0.3 mL/min		
Mobile Phase: A: 0.1% Formic Acid in Water B: 0.1% Formic Acid in Methanol	Temperature: 30 $^{\circ}$ C	Detection: MS/MS	

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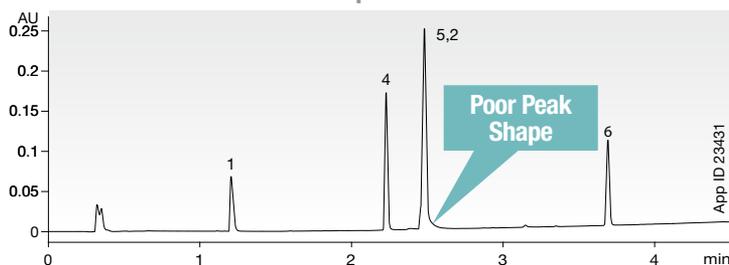


Luna Omega UHPLC columns contain a unique silica modified using a proprietary, post-synthetic thermal treatment process to provide extraordinary mechanical strength and significantly greater inertness than traditional fully porous and hybrid materials. This greatly minimizes secondary interactions that negatively affect peak shape, allowing for greater method accuracy.

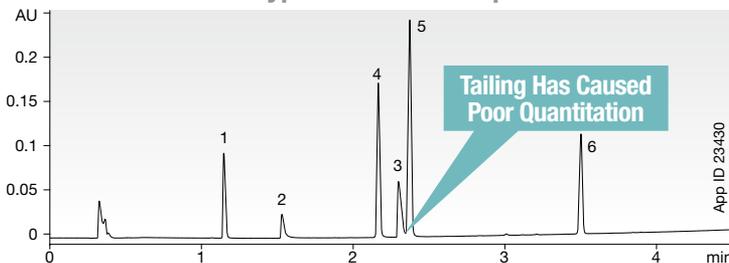
Luna® Omega 1.6µm C18



Waters® ACQUITY® BEH 1.7µm C18



Thermo Scientific® Hypersil GOLD® 1.9µm C18



Conditions for all columns:

Columns:	Luna Omega 1.6µm C18	Gradient:	Time (min)	% B	Temperature:	Ambient
	ACQUITY BEH 1.7µm C18		0	5	Detection:	UV @ 254 nm
	Hypersil GOLD 1.9µm C18		5	95	Sample:	1. Pindolol
Dimension:	50 x 2.1 mm		6	95		2. Chlorimipramine
Mobile Phase:	A: 0.1% Formic Acid in Water		6.1	5		3. Nortriptyline
	B: 0.1% Formic Acid in Acetonitrile		8	5		4. 3-Methyl-4-nitrobenzoic acid
		Flow Rate:	0.4 mL/min			5. 5-Methylsalicylate
						6. Hexanophenone

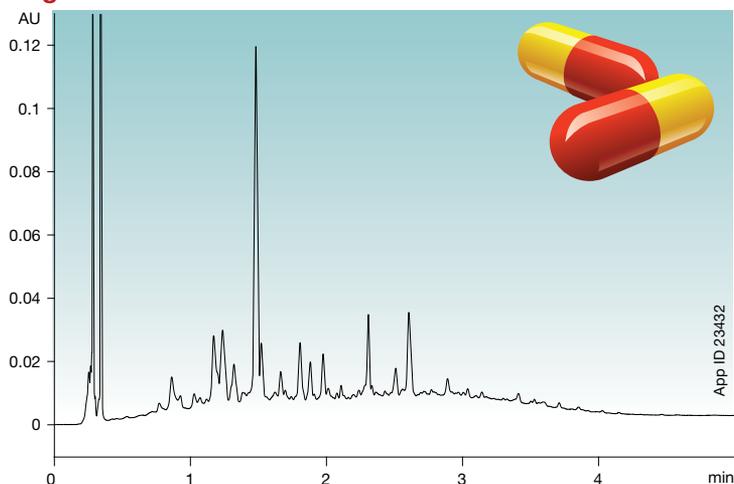
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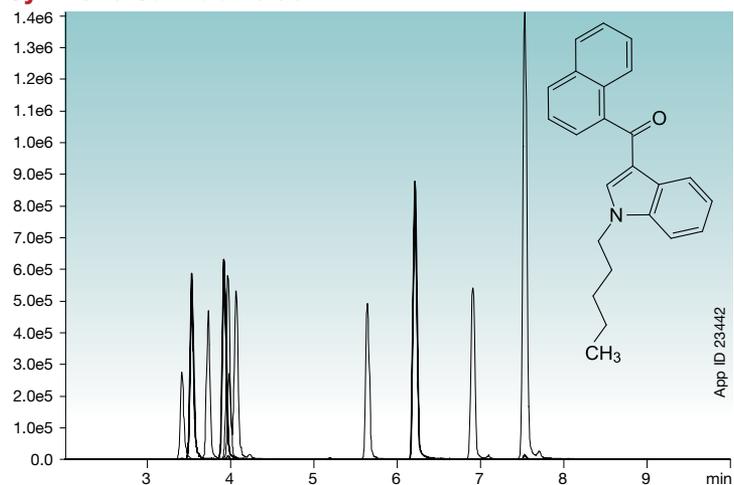
Uses: Pharmaceutical and Toxicology

Utilize the versatility of Luna Omega 1.6 μ m C18 columns to develop or even improve methods for any industry!

Degradation Profile – Male Libido Pill



Synthetic Cannabinoids



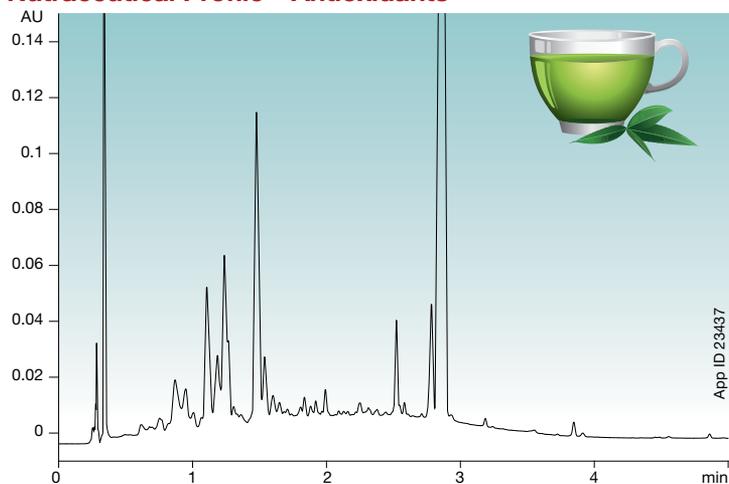
Find full application details and many other useful demonstrations at: www.phenomenex.com/LunaOmegaApps



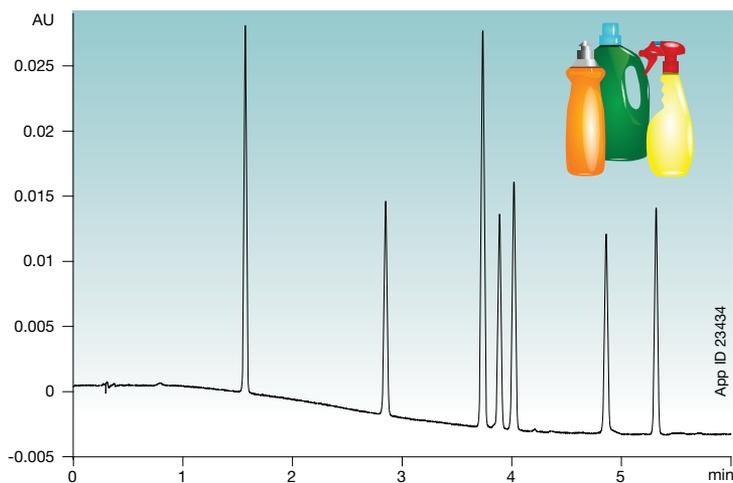
Uses: Food and Environmental

Utilize the versatility of Luna® Omega 1.6µm C18 columns to develop or even improve methods for any industry!

Nutraceutical Profile – Antioxidants



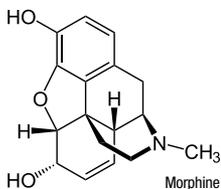
Phenols



Find full application details and many other useful demonstrations at: www.phenomenex.com/LunaOmegaApps



Luna[®] Omega + Kinetex[®] = Happy UHPLC

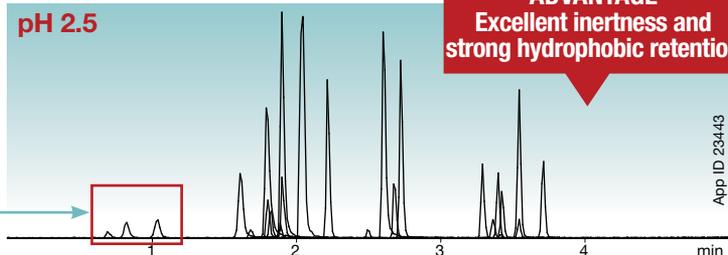


Drugs of Abuse Analysis

Combining orthogonal UHPLC particle morphologies and selectivities like the Luna Omega C18, Kinetex Biphenyl, and Kinetex EVO C18 will drastically increase your probability of separation success!

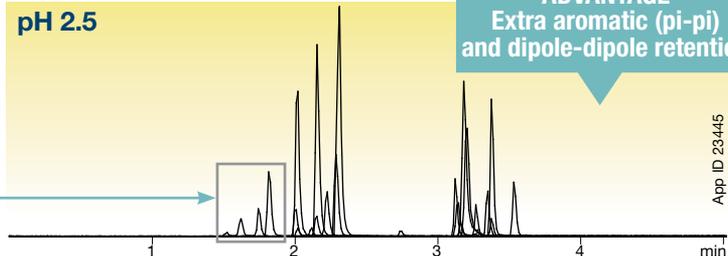
Luna Omega 1.6 μ m C18

pH 2.5



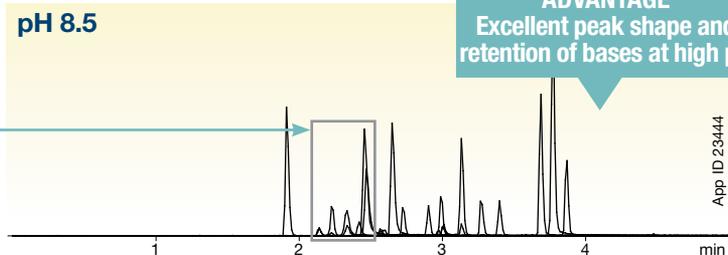
Kinetex 1.7 μ m Biphenyl

pH 2.5



Kinetex 1.7 μ m EVO C18

pH 8.5



Comparative separations may not be representative of all applications.

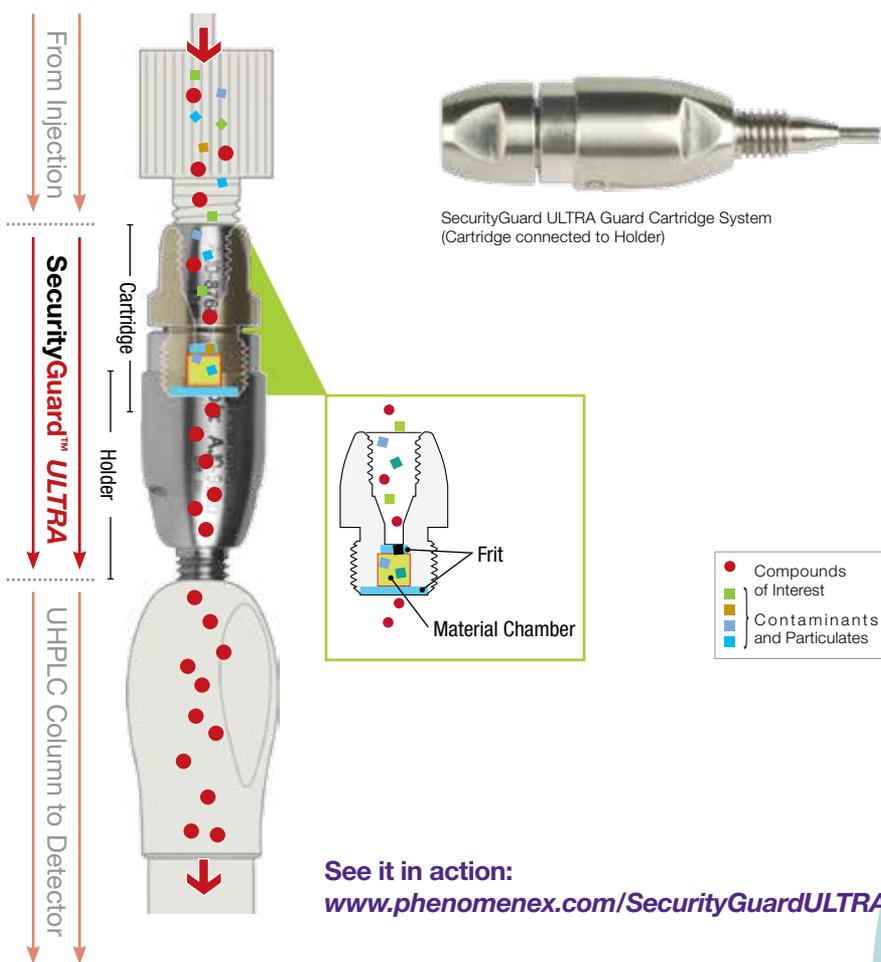


Protect any UHPLC column

Protect your UHPLC column, including Luna® Omega columns, from damaging contaminants and microparticulates with the SecurityGuard ULTRA guard cartridge system!



- Simple to use
- Extend column lifetime
- Pressure rated to 20,000 psi (1,378 bar)
- Fits virtually all manufacturers' columns 2.1 to 4.6mm ID



See it in action:
www.phenomenex.com/SecurityGuardULTRA



Buy Luna® Omega Now

Ordering Information

1.6 µm Minibore Columns (mm)				SecurityGuard™ ULTRA Cartridges†
Phases	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
C18	00B-4742-AN	00D-4742-AN	00F-4742-AN	AJO-9502 for 2.1 mm ID

† SecurityGuard ULTRA Cartridges require holder, Part No.: AJO-9000



If Luna analytical columns do not provide at least an equivalent separation as compared to a competing column of the same particle size, similar phase and dimensions, send in your comparative data within 45 days and keep the Luna column for FREE.

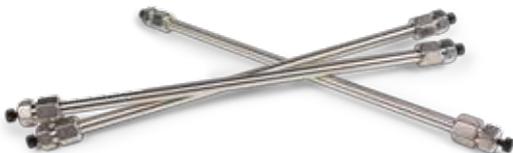


Luna for HPLC

Don't miss out on classically wonderful Luna HPLC columns in a variety of selectivities and particle sizes:

2.5 µm, 3 µm, 5 µm, 10 µm
C18(2), Si(2), C8(2), C5, Phenyl-Hexyl, PFP(2), HILIC, CN, NH₂, SCX

Find them at: www.phenomenex.com/Luna



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