

NEW



Thrive

with Kinetex Core-Shell Technology

Shockingly better performance than your current HPLC/UHPLC/PREP LC column. **Guaranteed!***



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



* See ordering information page for complete guarantee details.



SIGNIFICANT COST SAVINGS

“The 1.7 μ m Kinetex 100 x 2.1 mm column was capable of resolving 16 different chemical entities with a 6 minute run time. This new analytical method will be used to replace 16 older methods thereby facilitating an annualised cost saving for the site of €320,000 (\$ 460,000 USD). ”

Pfizer



CLINICAL

ENVIRONMENTAL



INCREASED PRODUCTIVITY

“Simple, efficient, and amazing resolution! Implementation of the Kinetex columns has allowed me to significantly increase production time while reducing solvent usage nearly tenfold... ”

Bold Formulators



EASY TRANSFERABILITY

“ The Kinetex column has worked great for our validated assays. We easily converted our HPLC methods to UPLC® methods using the Kinetex column and have enjoyed being [able] to run fast UPLC® chromatography... ”

Amgen



IMPROVED RESULTS

“ I was able to reduce my analysis time from 150 minutes to 60 minutes (including equilibration time) with the use of Kinetex! ”

DSM Nutritional Products

Thrive with Kinetex Core-Shell Technology!

Complete Scalable Solution from UHPLC to HPLC to PREP LC



High Efficiency Particle

Using sol-gel processing techniques that incorporate nano structuring technology, a durable, homogeneous porous shell is grown on a solid silica core. This highly optimized process combined with industry leading column packing technology produces highly reproducible columns that generate extremely high plate counts.

Kinetex Core-Shell

- High particle density helps create optimal bed structure which reduces band broadening effects of Eddy Diffusion
- Ultra-high performance on HPLC and UHPLC systems alike
- Reduced diffusion path improves efficiency



Fully Porous

- Less homogenous bed structure leads to performance loss
- Ultra-high performance limited to sub-2 μm particles on UHPLC systems
- Diffusion path limits efficiencies



Better Performance than Fully Porous Particles

Fully Porous	vs	Kinetex Core-Shell	Average Efficiency Gain with Kinetex*
5 μm		5 μm	90% Higher
3 μm		2.6 μm	85% Higher
1.7 μm		1.7 μm	20% Higher
1.7 μm		1.3 μm	50% Higher

* May not be representative of all separations.

NEW

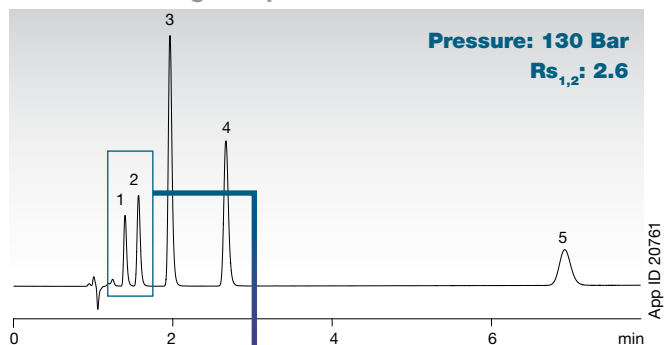


Instantly Improve 5 μm and 3 μm Methods

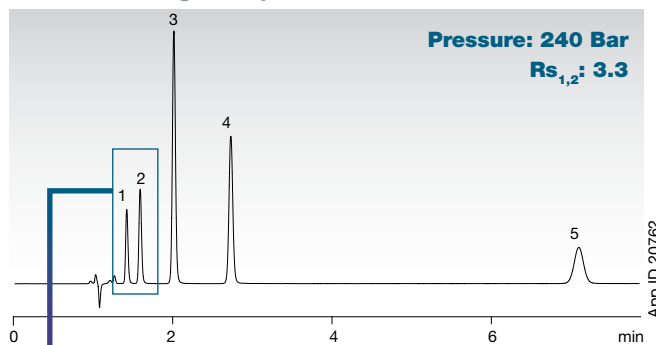
Immediately improve resolution, productivity, and sensitivity of your current 3 μm and 5 μm HPLC methods with **Kinetex 5 μm** core-shell technology. This core-shell particle was specifically developed for use on standard or older model HPLC systems that may have low pressure limitations.

Higher Resolution with No Pressure Increase

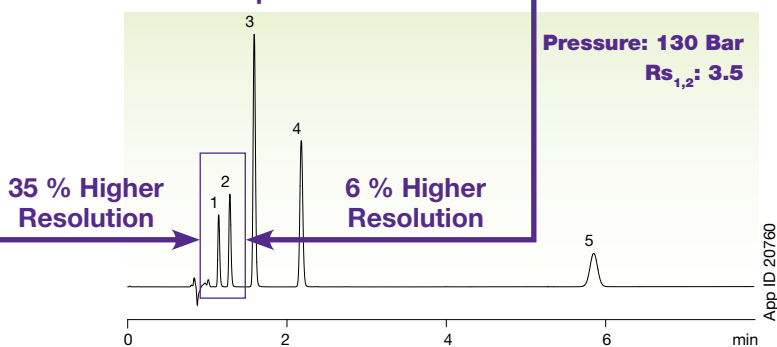
Waters® XBridge™ 5 μm C18



Waters XBridge 3.5 μm C18



Kinetex 5 μm C18



Conditions for all columns:

- Columns:** Kinetex 5 μm C18
XBridge 5 μm C18
XBridge 3.5 μm C18
- Dimensions:** 150 x 4.6 mm
- Mobile Phase:** Water/Acetonitrile/Phosphoric acid (600:400:2)
- Flow Rate:** 1.5 mL/min
- Temperature:** Ambient
- Detection:** UV @ 235 nm
- Sample:** 1. Impurity A
2. Impurity B
3. Acetylsalicylic acid
4. Salicylic acid
5. Impurity D

Waters is a registered trademark and XBridge is a trademark of Waters Corporation. Phenomenex is not affiliated with Waters Corporation. Comparative separations may not be representative of all applications.

NEW

First and Only Core-Shell Material for Axia™ Preparative Purifications

The new Axia packed Kinetex 5 μm will provide incredible gains in efficiency and performance for any of your Prep LC methods. Learn more online at:

www.phenomenex.com/kinetexprep





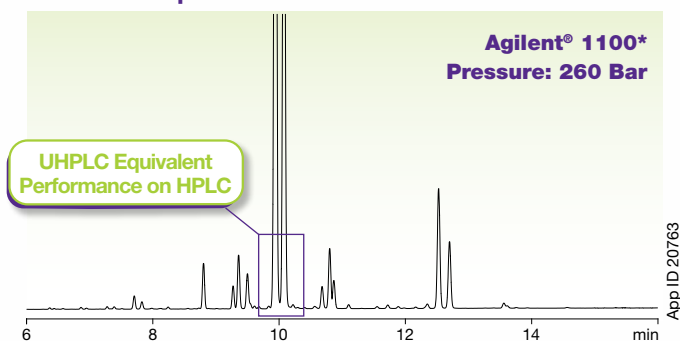
A Versatile Upgrade for HPLC and UHPLC



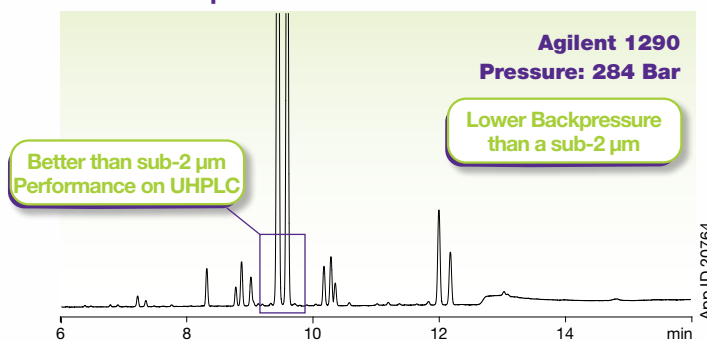
On a low volume HPLC or UHPLC system **Kinetex 2.6 µm** columns will perform like a fully porous sub-2 µm column, providing up to 3x the efficiency of 5 µm and double the efficiency of 3 µm fully porous media. Dramatically improve the productivity and performance of your existing methods with the use of shorter Kinetex columns, all while decreasing your solvent usage!

Sub-2 µm Performance with Kinetex 2.6 µm on HPLC and UHPLC Systems

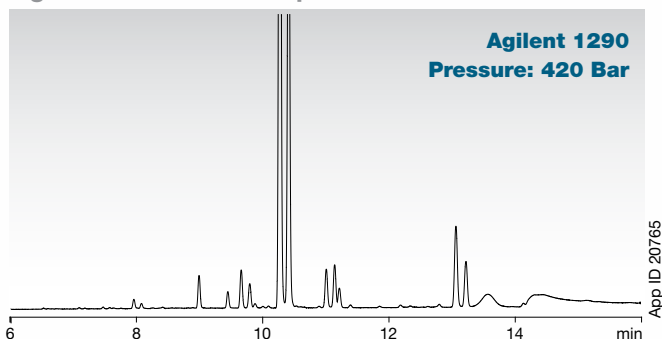
Kinetex 2.6 µm C18



Kinetex 2.6 µm C18



Agilent® ZORBAX® 1.8 µm SB-C18



Conditions for all columns same except where noted:

Columns: Kinetex 2.6 µm C18 (Agilent 1100*)
Kinetex 2.6 µm C18 (Agilent 1290)
ZORBAX 1.8 µm SB-C18 (Agilent 1290)

Dimensions: 100 x 4.6 mm

Mobile Phase: A: Water with 0.1% TFA
B: Acetonitrile with 0.1% TFA

Gradient	Time (min)	% B
	0	10
	20	70

Flow Rate: 1.2 mL/min

Temperature: Ambient

Detection: UV @ 210 nm

Sample: Mupirocin degradants

* Agilent 1100 was optimized with the Core-Shell Performance Enhancement Kit AQO-8892. Agilent and ZORBAX are registered trademarks of Agilent Technologies, Inc. Phenomenex is not affiliated with Agilent Technologies. Comparative separations may not be representative of all applications.

Maximize Performance with Kinetex 2.6 µm

Decrease the system dwell volume of your HPLC instrument with the pre-cut tubing and column fittings found in the Core-Shell Performance Enhancement Kit and instantly improve the observed performance of your Kinetex core-shell 2.6 µm column.

www.phenomenex.com/enhancement



UHPLC

NEW



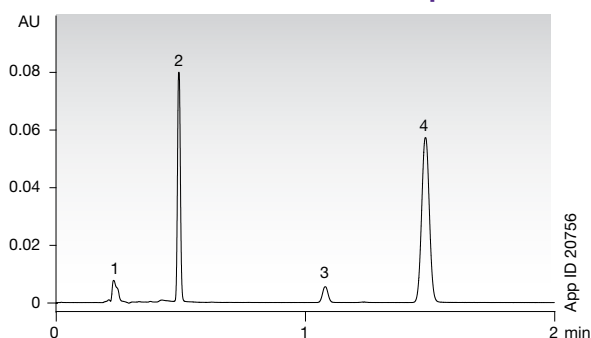
Get the Most Performance Out of Your UHPLC System



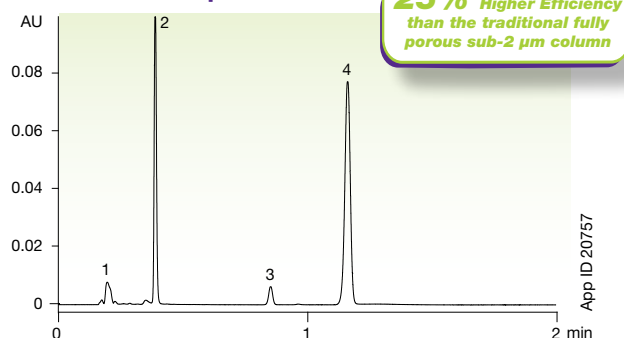
Kinetex 1.3 and 1.7 μm core-shell technology produces increased efficiencies over traditional sub-2 μm columns on the market, yielding remarkable chromatographic resolution, higher peak capacities, and greater sensitivity, so you can get the most out of every UHPLC analysis.

Incredible Efficiency Gains

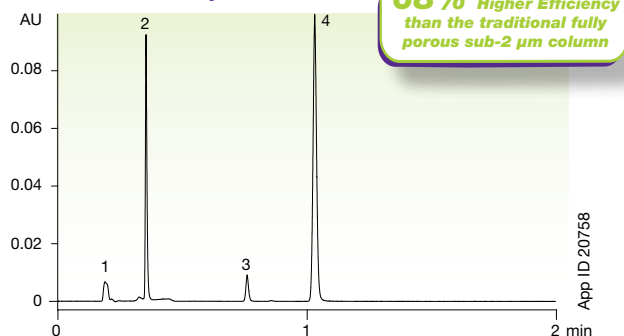
Waters® ACQUITY® BEH™ 1.7 μm C18



Kinetex 1.7 μm C18



Kinetex 1.3 μm C18



Easy Installation on UHPLC Systems:
www.phenomenex.com/kinetex

Conditions for all columns:

- Columns:** Kinetex 1.7 μm C18
Kinetex 1.3 μm C18
ACQUITY UPLC® BEH 1.7 μm C18
- Dimensions:** 50 x 2.1 mm
- Mobile Phase:** Acetonitrile / Water (50:50)
- Flow Rate:** 0.5 mL/min
- Temperature:** Ambient
- Detection:** UV @ 254 nm
- Instrument:** Waters® ACQUITY® UPLC®
- Sample:** 1. Acetophenone
2. Benzene
3. Toluene
4. Naphthalene



Efficiency calculated from peak 4 in each chromatogram. Waters, ACQUITY, and UPLC are registered trademarks, and BEH Technology is a trademark of Waters Corporation. Phenomenex is not affiliated with Waters Corporation. Comparative separations may not be representative of all applications.

Column Protection with No Loss in Performance

Trap contaminants and microparticulates within the SecurityGuard ULTRA guard cartridge system and learn how to greatly extend UHPLC column life at:

www.phenomenex.com/SecurityGuardULTRA



Ordering Information

NEW!

5 µm Columns (mm)

Part No.	SecurityGuard ULTRA Cartridges*		SecurityGuard ULTRA Cartridges*		SecurityGuard ULTRA Cartridges*		SecurityGuard ULTRA Cartridges*	
	50 x 2.1	3/µk	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/µk	3/µk
XB-C18	00B-4605-AN	AJO-8782	00B-4605-EO	00D-4605-EO	00F-4605-EO	00G-4605-EO	AJO-8788	AJO-8788
C18	00B-4601-AN	AJO-8782	00B-4601-EO	00D-4601-EO	00F-4601-EO	00G-4601-EO	AJO-8788	AJO-8788
C8	00B-4608-AN	AJO-8784	00B-4608-EO	00D-4608-EO	00F-4608-EO	00G-4608-EO	AJO-8770	AJO-8770
PFP	00B-4602-AN	AJO-8787	00B-4602-EO	00D-4602-EO	00F-4602-EO	00G-4602-EO	AJO-8773	AJO-8773
Phenyl-Hexyl	00B-4603-AN	AJO-8788	00B-4603-EO	00D-4603-EO	00F-4603-EO	00G-4603-EO	AJO-8774	AJO-8774

* SecurityGuard ULTRA cartridges require holder, Part No. AJO-9000.
for 4.6 mm ID

NEW!

5 µm Axia™ Packed Preparative Columns (mm)

Part No.	50 x 21.2		100 x 21.2		150 x 21.2		250 x 21.2	
	XB-C18	00B-4605-PO-AX	00D-4605-PO-AX	00F-4605-PO-AX	00G-4605-PO-AX	00B-4601-PO-AX	00D-4601-PO-AX	00F-4601-PO-AX
C18	00B-4602-PO-AX	00D-4602-PO-AX	00F-4602-PO-AX	00G-4602-PO-AX	00B-4602-PO-AX	00D-4602-PO-AX	00F-4602-PO-AX	00G-4602-PO-AX
PFP	00B-4602-PO-AX	00D-4602-PO-AX	00F-4602-PO-AX	00G-4602-PO-AX	00B-4602-PO-AX	00D-4602-PO-AX	00F-4602-PO-AX	00G-4602-PO-AX
Phenyl-Hexyl	00B-4603-PO-AX	00D-4603-PO-AX	00F-4603-PO-AX	00G-4603-PO-AX	00B-4603-PO-AX	00D-4603-PO-AX	00F-4603-PO-AX	00G-4603-PO-AX

NEW!

1.3 µm Columns (mm)

Part No.	50 x 2.1	
	C18	00B-4515-AN

SecurityGuard ULTRA

Cartridge Holder

Part No.	Unit
AJO-9000	ea

1.7 µm MidBore Columns (mm)

Part No.	30 x 3.0		50 x 3.0		100 x 3.0		3/µk	
	XB-C18	00A-4498-YO	00B-4498-YO	00D-4498-YO	00F-4498-YO	AJO-8775	AJO-8775	AJO-8775
C18	—	00B-4475-YO	00D-4475-YO	00F-4475-YO	AJO-8777	AJO-8777	AJO-8777	AJO-8777
C8	00A-4499-YO	00B-4499-YO	00D-4499-YO	00F-4499-YO	AJO-8780	AJO-8780	AJO-8780	AJO-8780
PFP	—	00B-4476-YO	00D-4476-YO	00F-4476-YO	AJO-8779	AJO-8779	AJO-8779	AJO-8779
HILC	—	00B-4474-YO	—	—	AJO-8781	AJO-8781	AJO-8781	AJO-8781

for 3.0 mm ID

Core-Shell

Performance Enhancement Kit

Part No.	Unit
AJO-8892	ea

NEW!

2.6 µm Analytical Columns (mm)

Part No.	30 x 4.6		50 x 4.6		75 x 4.6		100 x 4.6		150 x 4.6	
	XB-C18	—	00B-4486-EO	00C-4486-EO	00D-4486-EO	00F-4486-EO	00G-4486-EO	AJO-8768	AJO-8768	AJO-8768
C18	00A-4482-EO	00B-4482-EO	00C-4482-EO	00D-4482-EO	00F-4482-EO	00G-4482-EO	AJO-8770	AJO-8770	AJO-8770	AJO-8770
C8	—	00B-4497-EO	00C-4497-EO	00D-4497-EO	00F-4497-EO	00G-4497-EO	AJO-8773	AJO-8773	AJO-8773	AJO-8773
PFP	00A-4477-EO	00B-4477-EO	00C-4477-EO	00D-4477-EO	00F-4477-EO	00G-4477-EO	AJO-8772	AJO-8772	AJO-8772	AJO-8772
HILC	—	00B-4461-EO	00C-4461-EO	00D-4461-EO	00F-4461-EO	00G-4461-EO	AJO-8774	AJO-8774	AJO-8774	AJO-8774
Phenyl-Hexyl	—	00B-4495-EO	00C-4495-EO	00D-4495-EO	00F-4495-EO	00G-4495-EO	AJO-8774	AJO-8774	AJO-8774	AJO-8774

for 4.6 mm ID

NEW!

2.6 µm MidBore™ Columns (mm)

Part No.	30 x 3.0		50 x 3.0		75 x 3.0		100 x 3.0		150 x 3.0	
	XB-C18	00A-4496-YO	00B-4496-YO	00C-4496-YO	00D-4496-YO	00F-4496-YO	00G-4496-YO	AJO-8775	AJO-8775	AJO-8775
C18	00A-4482-YO	00B-4482-YO	00C-4482-YO	00D-4482-YO	00F-4482-YO	00G-4482-YO	AJO-8777	AJO-8777	AJO-8777	AJO-8777
C8	00A-4497-YO	00B-4497-YO	00C-4497-YO	00D-4497-YO	00F-4497-YO	00G-4497-YO	AJO-8780	AJO-8780	AJO-8780	AJO-8780
PFP	00A-4477-YO	00B-4477-YO	00C-4477-YO	00D-4477-YO	00F-4477-YO	00G-4477-YO	AJO-8779	AJO-8779	AJO-8779	AJO-8779
HILC	00A-4461-YO	—	—	—	00D-4495-YO	00F-4495-YO	AJO-8781	AJO-8781	AJO-8781	AJO-8781

for 3.0 mm ID

NEW!

2.6 µm MiniBore Columns (mm)

Part No.	30 x 2.1		50 x 2.1		100 x 2.1		150 x 2.1		3/µk	
	XB-C18	00A-4496-AN	00B-4496-AN	00D-4496-AN	00F-4496-AN	AJO-8782	AJO-8782	AJO-8782	AJO-8782	AJO-8782
C18	00A-4482-AN	00B-4482-AN	00D-4482-AN	00F-4482-AN	AJO-8784	AJO-8784	AJO-8784	AJO-8784	AJO-8784	AJO-8784
C8	00A-4497-AN	00B-4497-AN	00D-4497-AN	00F-4497-AN	AJO-8787	AJO-8787	AJO-8787	AJO-8787	AJO-8787	AJO-8787
PFP	00A-4477-AN	00B-4477-AN	00D-4477-AN	00F-4477-AN	AJO-8786	AJO-8786	AJO-8786	AJO-8786	AJO-8786	AJO-8786
HILC	00A-4461-AN	00B-4461-AN	00D-4461-AN	00F-4461-AN	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788
Phenyl-Hexyl	00A-4495-AN	00B-4495-AN	00D-4495-AN	00F-4495-AN	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788

for 2.1 mm ID

Part No.	30 x 2.1		50 x 2.1		100 x 2.1		150 x 2.1		3/µk	
	XB-C18	00A-4498-AN	00B-4498-AN	00D-4498-AN	00F-4498-AN	AJO-8782	AJO-8782	AJO-8782	AJO-8782	AJO-8782
C18	00A-4475-AN	00B-4475-AN	00D-4475-AN	00F-4475-AN	AJO-8784	AJO-8784	AJO-8784	AJO-8784	AJO-8784	AJO-8784
C8	00A-4499-AN	00B-4499-AN	00D-4499-AN	00F-4499-AN	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788
PFP	00A-4476-AN	00B-4476-AN	00D-4476-AN	00F-4476-AN	AJO-8786	AJO-8786	AJO-8786	AJO-8786	AJO-8786	AJO-8786
HILC	00A-4474-AN	00B-4474-AN	00D-4474-AN	00F-4474-AN	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788
Phenyl-Hexyl	—	00B-4500-AN	00D-4500-AN	00F-4500-AN	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788	AJO-8788

for 2.1 mm ID



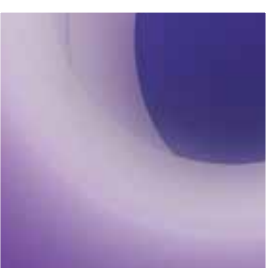
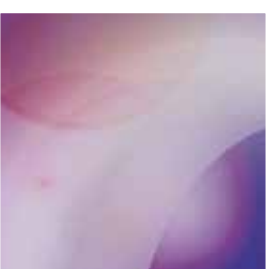
guarantee

If you are not completely satisfied with Kinetex core-shell columns, send in your comparative data to a similar product with the Kinetex column within 45 days for a FULL REFUND.

1. Interested in how to connect a Kinetex to your system?
2. Craving a certain HPLC/UHPLC application?
3. Looking to protect your UHPLC column?
4. Need method optimization tips?
5. Just want more core-shell?

Visit the Kinetex[®] experience online

www.phenomenex.com/Kinetex
for all this and much more!



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Axia is patented by Phenomenex. U.S. Patent No. 7,674,383

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