KINETEX®
Core-Shell Technology

Yes You Can!

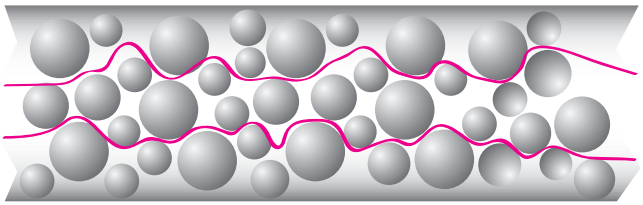
- Develop robust methods from pH 1-12
- Get improved peak shape for bases
- Easily reduce run times and increase sensitivity

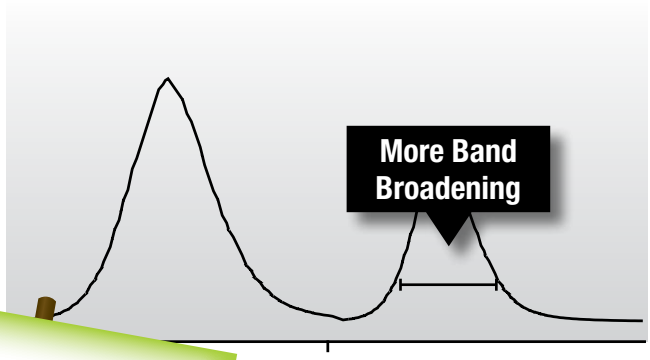
phenomenex®
...breaking with tradition℠

THE PAST

Fully Porous

You used to have to deal with chromatographic band broadening, low sensitivity, and long run times caused by classical fully porous silica.

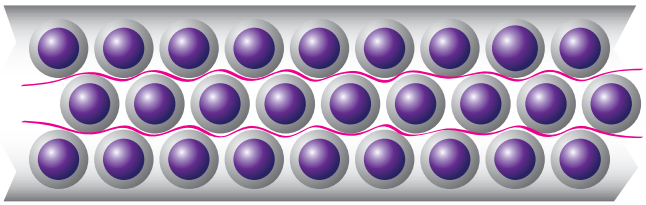


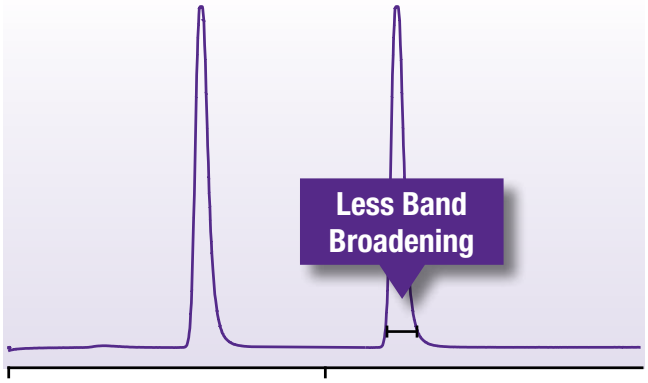


THE PRESENT

Core-Shell Technology

That was until Phenomenex, the leading Core-Shell Technology developer and manufacturer, came to liberate you with core-shell particles for each of your specific techniques and applications.





- **Improved Results**
- **Increased Productivity**
- **Easy Transferability**
- **Significant Cost Savings**

2009
Small Molecules
KINETEX® Core-Shell Technology

2010
Synthetic Oligonucleotides
CLARITY® BIOSOLUTIONS

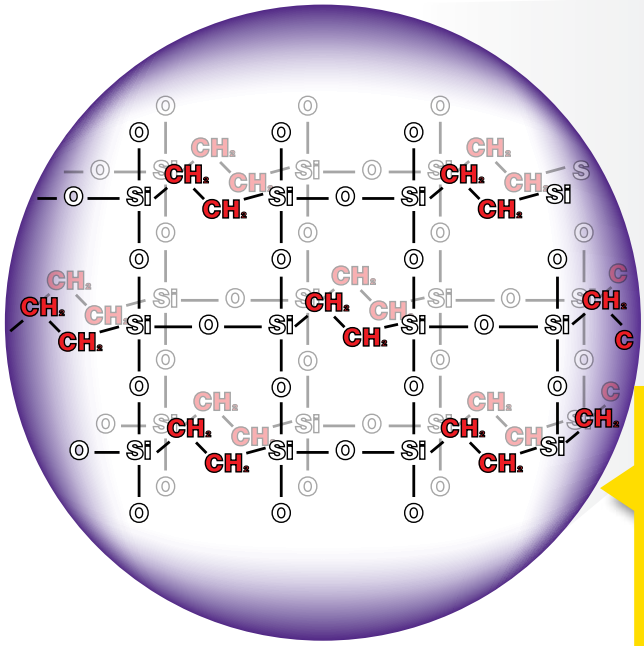
2011
Peptides / Proteins
AERIS™ Core-Shell Technology for BioSeparations

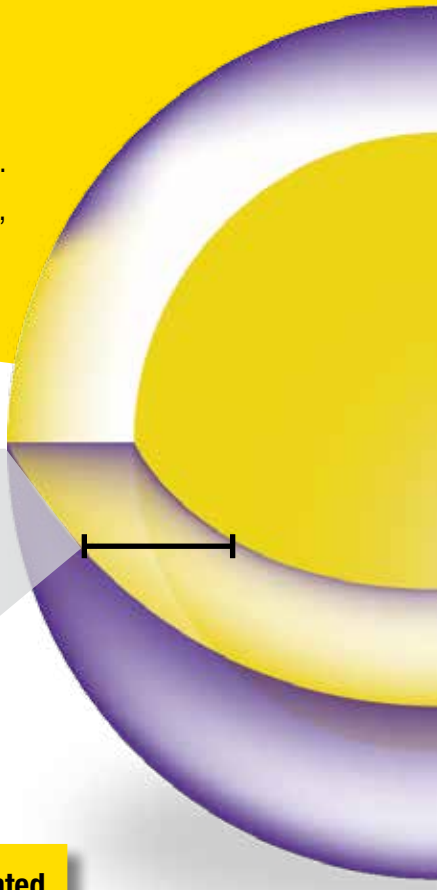
2014
And Now

AMAZING NEW KINETEX EVO, NOW!

Introducing Kinetex® EVO

This is truly the next step in the evolution of the chromatographic particle. With Kinetex EVO you now have the freedom to achieve improved results, cost savings, and overall higher productivity at low, neutral, and high pH!





Kinetex EVO uses a patented organo-silica grafting process which incorporates uniform stabilizing ethane cross-linking to provide resistance to high pH attack while maintaining mechanical strength of the core-shell particle.

- Develop robust methods from pH 1-12
- Get improved peak shape for bases
- Easily reduce run times and increase sensitivity

What emotion will Kinetex EVO bring out in you ...

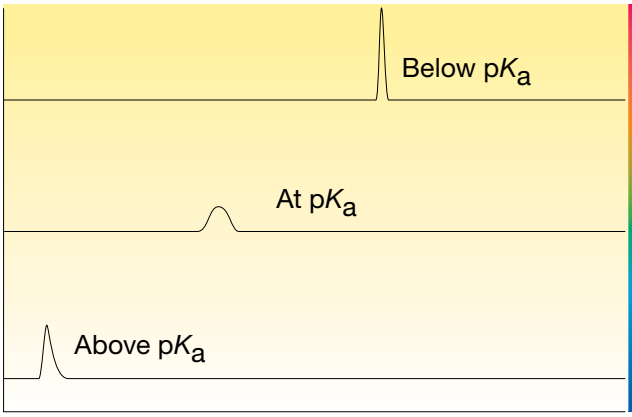
STRENGTH

pH at Your Control

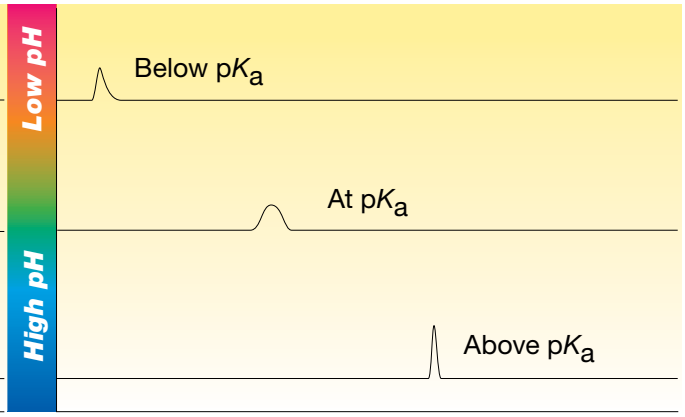
While low pH mobile phases are quite useful, once the door to both low and high pH is opened, your method development options rapidly increase.

The illustrations below exemplify how easy it can be to influence the retention behavior and peak shape of ionizable compounds by adjusting your mobile phase pH.

Effects of mobile phase pH on Acids



Effects of mobile phase pH on Bases

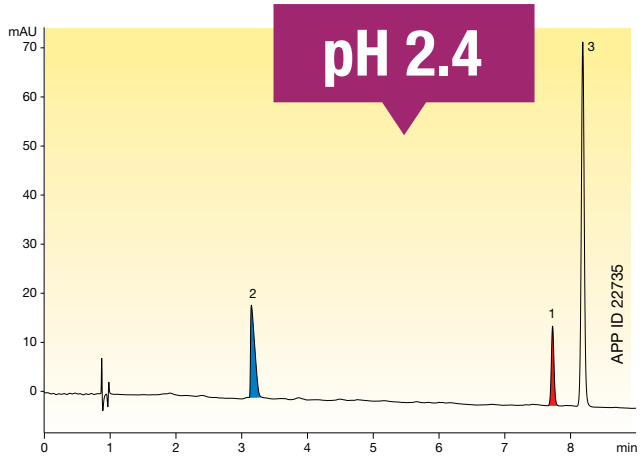


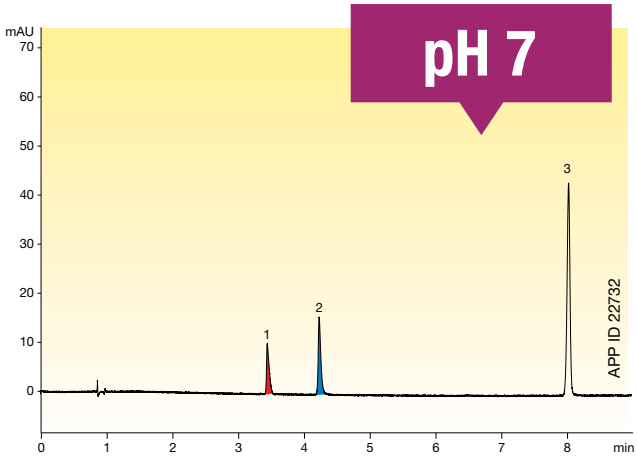
KINETEX®
Core-Shell Technology

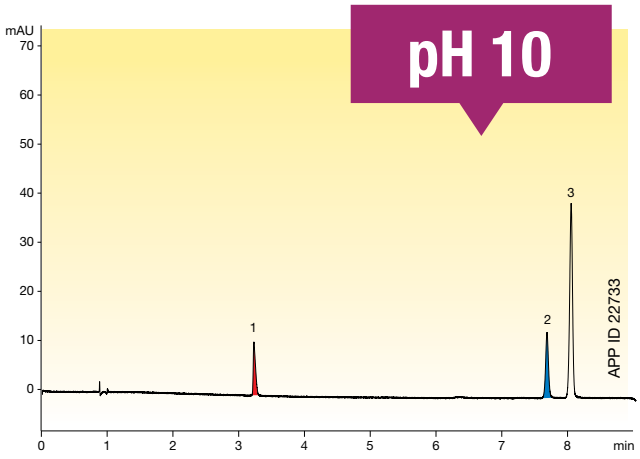
STRENGTH

Show Those Peaks Who's Boss

With excellent performance across a large pH range, Kinetex EVO columns allow you to transform chromatograms and manipulate retention order, no matter the combination of compound functionalities. Now is your chance to break the mold and let your creative LC side flourish.







Conditions for all columns:

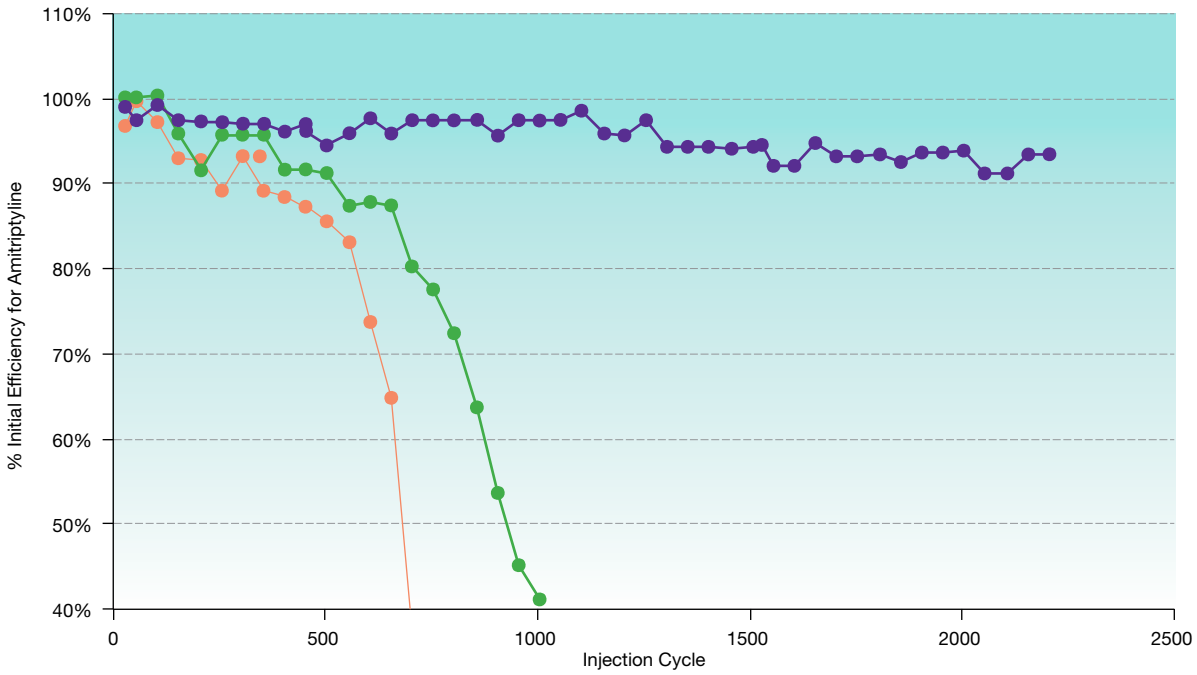
Column: Kinetex 5 µm EVO C18
Dimensions: 150 x 4.6 mm
Part No.: 00F-4633-E0
Mobile Phase: A: 20 mM Potassium Phosphate
B: Acetonitrile
Gradient: 20-75 % B in 10 minutes
Flow Rate: 1.5 mL/min
Temperature: 30 °C
Detection: UV @ 254 nm
Sample: 1. Ibuprofen
2. Diphenhydramine
3. Ethyl Benzene

TRUST

Rugged and Wonderful

With its unique chemistry, the Kinetex® EVO particle ensures improved pH stability at alkaline mobile phase conditions along with amazing core-shell performance. It's time for you to expand your method development options and go where other core-shell products can't!

High pH Stability



Conditions for all columns:

Column: Kinetex 5 µm EVO C18
Poroshell 2.7 µm HPH-C18
UltraCore 5 µm Super C18

Dimensions: 50 x 2.1 mm

Mobile Phase: A: 10 mM Ammonium bicarbonate (pH 10.5)
B: Acetonitrile

Gradient: 5% to 95% B in 2.3 min. Hold at 95 % B for 0.7 min. Re-equilibrate at 5 % B for 1.5 min.

Flow Rate: 0.8 mL/min

Temperature: 60 ˚C

Detection: UV @ 254 nm

Sample: 1. Amitriptyline

- Kinetex 5 µm EVO C18
- Agilent® Poroshell® 2.7 µm HPH-C18
- ACE® UltraCore™ 5 µm Super C18

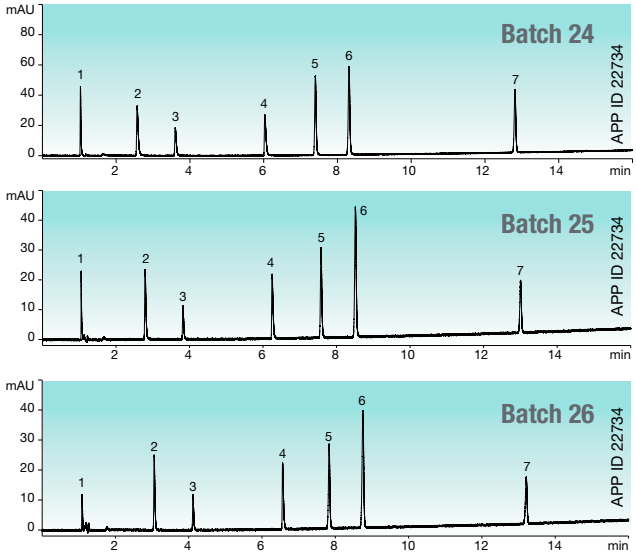
KINETEX
Core-Shell Technology

TRUST

Dependability Batch-to-Batch, Column-to-Column

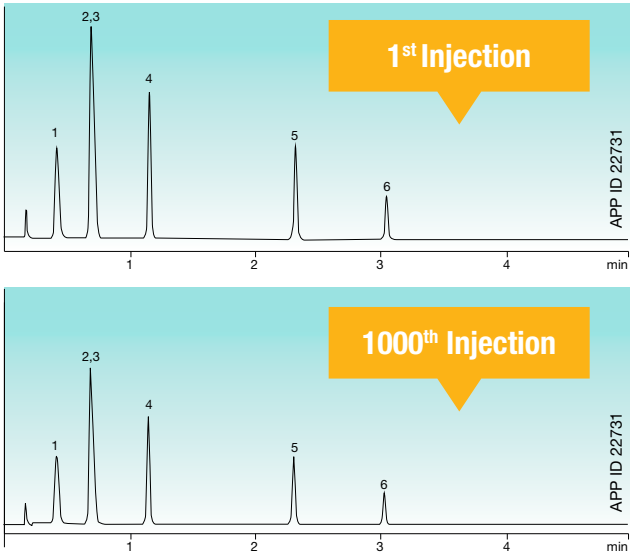
Exceptionally rigorous quality control and manufacturing steps ensure that Kinetex EVO columns deliver the pinnacle of performance values and mechanical strength time after time. Simply put, that's reproducibility that you can trust and feel at ease with!

One of Many Internal Batch/Column QC Tests



Column: Kinetex 5 µm EVO C18
Dimensions: 150 x 4.6 mm
Part No.: 00F-4633-E0
Mobile Phase: A: 0.1 % Formic acid in Water
B: 0.1 % Formic acid in Acetonitrile
Gradient: 5-95 % B in 17.76 minutes
Flow Rate: 1.25 mL/min
Temperature: 30 °C
Detection: UV @ 254 nm
Sample: 1. Uracil
2. Pindolol
3. Chlorpheniramine
4. Nortriptyline
5. 3-Methyl-4-Nitrobenzoic acid
6. 2-hydroxy,5-methylbenzaldehyde
7. Hexanophenone

Customer Example – Run-to-Run Consistency



Column: Kinetex 5 µm EVO C18
Dimensions: 50 x 2.1 mm
Part No.: 00B-4633-AN
Mobile Phase: A: 0.1 % Ethanolamine in Water (pH~10.5)
B: 0.1 % Ethanolamine in Acetonitrile
Gradient:

Time (min)	% B
0	10
5	90

Flow Rate: 0.5 mL/min
Temperature: 40 °C
Detection: UV @ 230 nm
Sample: 1. Pyridine
2. Aniline
3. Unknown peak
4. Benzyl alcohol
5. Toluene
6. Unknown peak
Data Courtesy of: Róbert Kormány, Egis Pharmaceuticals Plc., Hungary

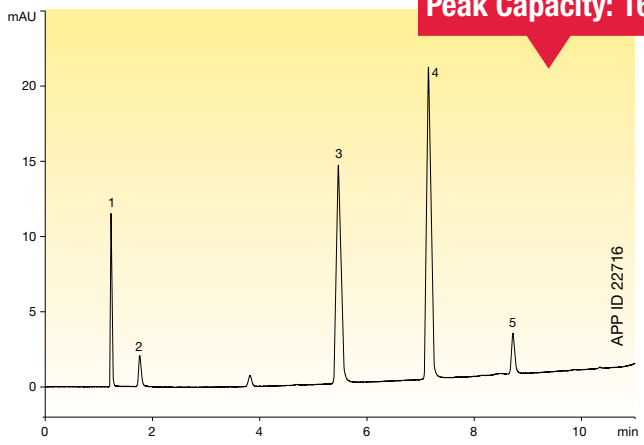
PRIDE

Wow! Look at those Marvelous Peak Shapes!

You're going to be the talk of the lab and department when you switch to Kinetex® EVO for your basic compound analyses. The unique organo-silica layer of ethane cross-linking found within each Kinetex EVO particle creates a highly inert surface which provides the additional benefit of better peak shape for bases.

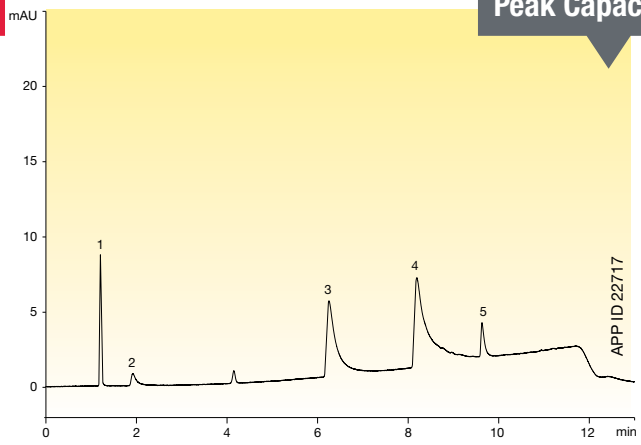
Kinetex 5 µm EVO
C18 150 x 4.6 mm

Pressure: 176 bar
Peak Capacity: 169



Supelco® Ascentis® Express
5 µm C18 150 x 4.6 mm

Pressure: 210 bar
Peak Capacity: 87



Conditions for all columns:

Column: Kinetex 5 µm EVO C18
Ascentis Express 5 µm C18

Dimensions: 150 x 4.6 mm

Mobile Phase: A: 20 mM Sodium phosphate dehydrate pH 7.0
B: Methanol

Gradient: 40 % to 90 % B over 10 minutes

Flow Rate: 1 mL/min

Temperature: Ambient

Detection: UV @ 254

Sample: 1. Scopolamine
2. Pseudoephedrine
3. Doxylamine
4. Chlorpheniramine
5. Diphenhydramine

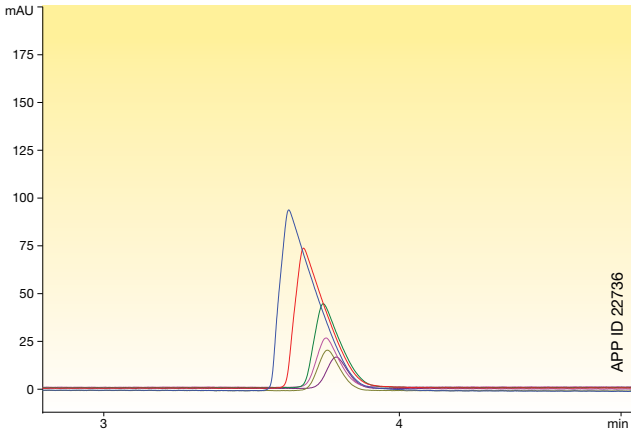
KINETEX®
Core-Shell Technology

CONFIDENCE

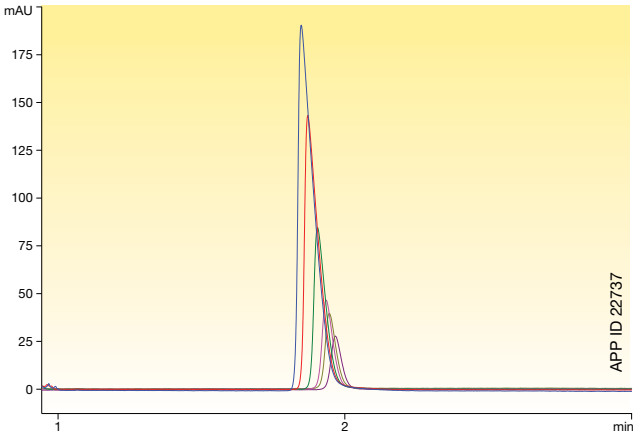
Do More Load-to-Load

Use Kinetex EVO columns to avoid the effects of peak shape distortion for bases that traditional fully porous and core-shell columns display. Even across multiple loading conditions, sharp compound peak shape is kept consistently good and strong using a Kinetex EVO LC column.

Core-Shell 5 µm C18



Kinetex 5 µm EVO C18



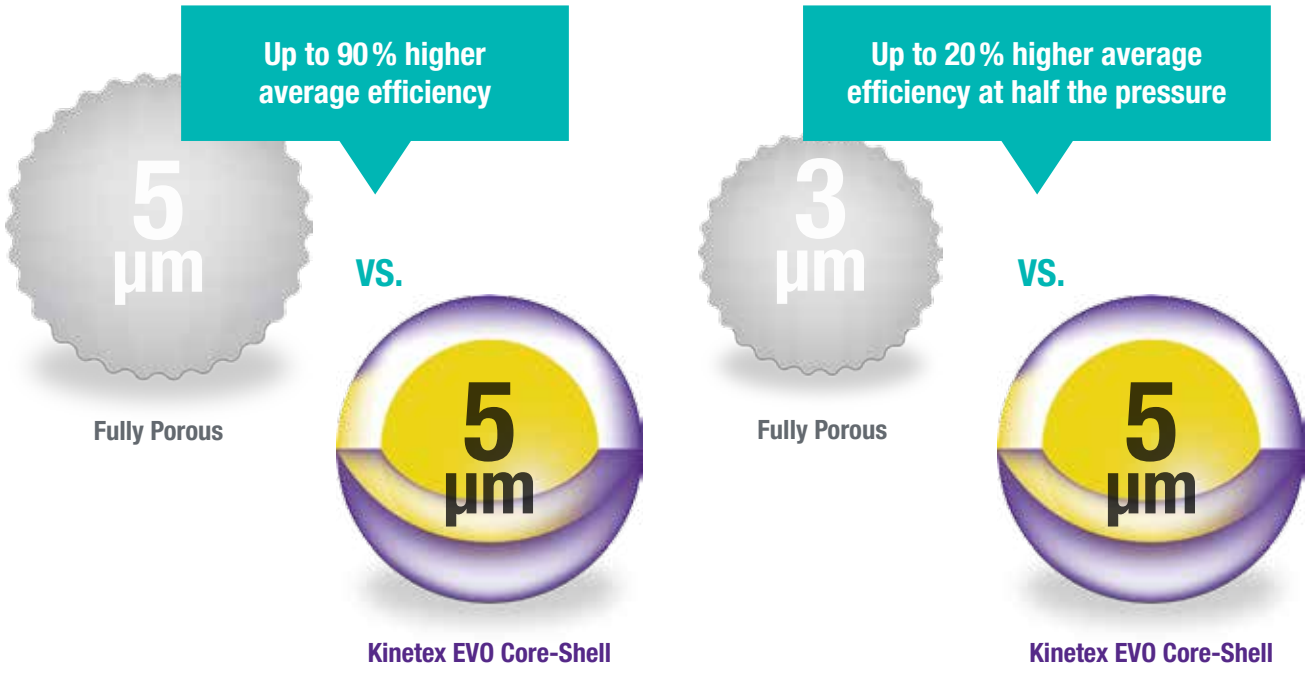
Conditions for all columns:

Column: Kinetex 5 µm EVO C18
Core-Shell 5 µm C18
Dimensions: 150 x 4.6 mm
Mobile Phase: 0.1 % TFA in Water / 0.1 % TFA in Acetonitrile (40:60)
Flow Rate: 1.5 mL/min
Temperature: Ambient
Detection: UV @ 254
Sample: 1 µg to 10 µg Loads of Nortriptyline

HAPPINESS

Instant Improvement of 5 µm and 3 µm Methods

Now you can cheerfully improve the resolution, productivity, and sensitivity of your current 3 µm and 5 µm methods using Kinetex® EVO 5 µm Core-Shell Technology. This revolutionary core-shell particle was specifically developed to give you great performance and true pH durability at very low HPLC backpressures.



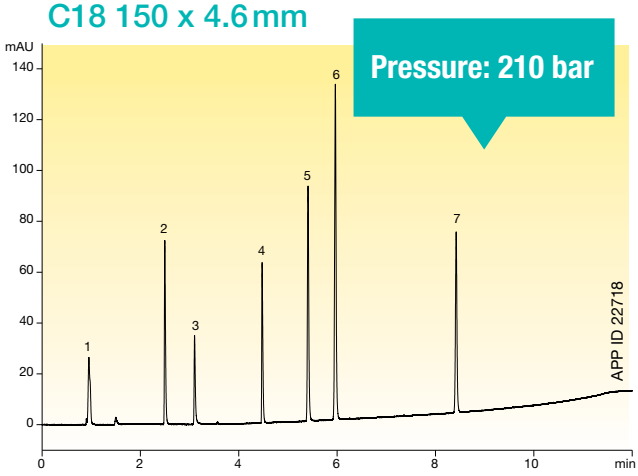
KINETEX®
Core-Shell Technology

HAPPINESS

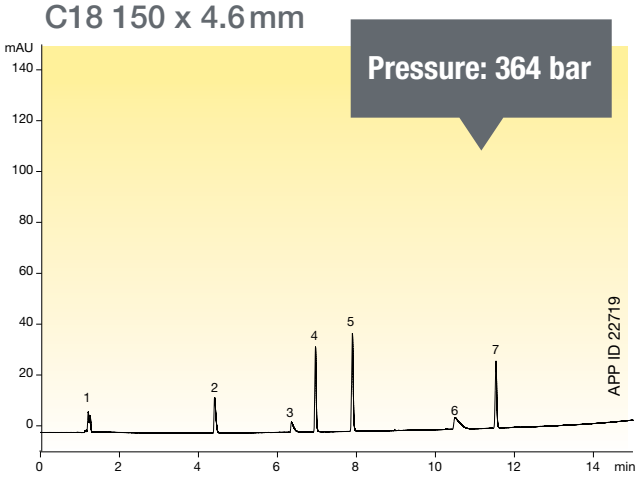
Drop in a Kinetex EVO 5 µm Column to Start Smiling

With the combination of rugged pH stability from 1-12 and the core-shell performance advantage, you can easily replace old hybrid silica columns and gain immediate method improvements without increasing backpressure. It's time to let chromatography cheer appear!

Kinetex 5 µm EVO C18 150 x 4.6 mm



Waters® XBridge® 3.5 µm C18 150 x 4.6 mm



Conditions for all columns:

Column: Kinetex 5 µm EVO C18
XBridge 5 µm C18
XBridge 3.5 µm C18

Dimensions: 150 x 4.6 mm

Mobile Phase: A: 0.1 % Formic acid in Water
B: 0.1 % Formic acid in Acetonitrile

Gradient: 5 % to 95 % B over 10 minutes

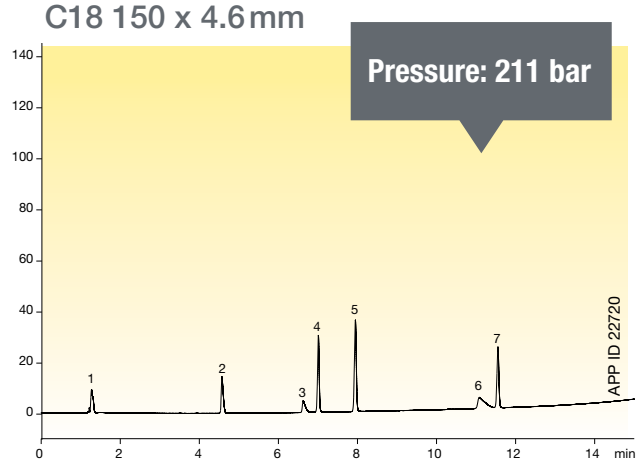
Flow Rate: 1.5 mL/min

Temperature: Ambient

Detection: UV @ 254

Sample:
1. Uracil
2. Pindolol
3. Chlorpheniramine
4. Nortriptyline
5. 3-Methyl-4-Nitrobenzoic acid
6. 2-hydroxy,5-methylbenzaldehyde
7. Hexaphenone

Waters XBridge 5 µm C18 150 x 4.6 mm

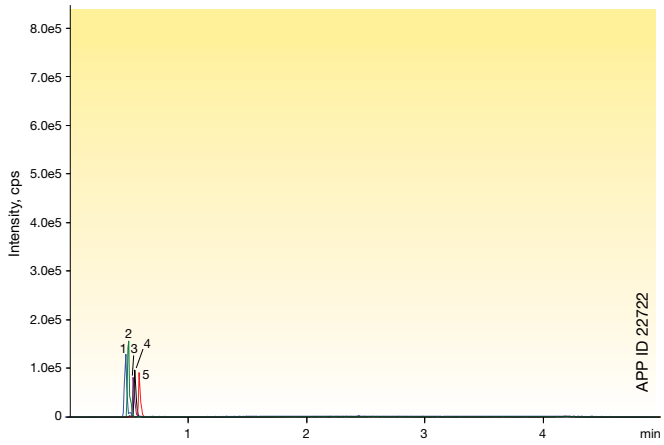


WONDER

Imagine No Suppression

Ever have that moment of panic when polar analytes elute way too early in low or neutral pH mobile phases? It's time to put that worry to rest and marvel at the way you can use the enhanced pH stability of Kinetex® EVO columns to dramatically improve the retention of polar, basic compounds.

Low pH



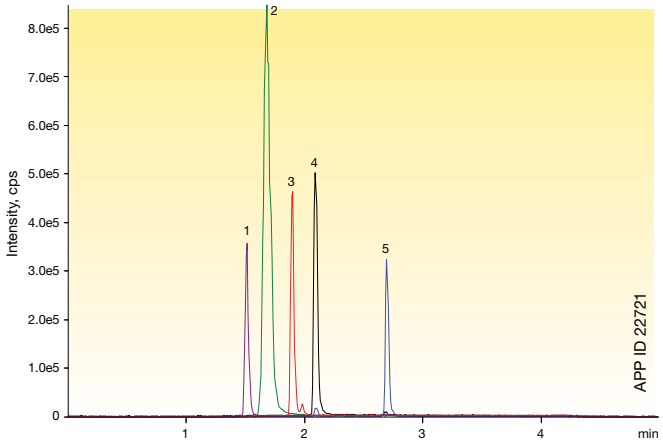
Column: Kinetex 5 µm EVO C18
Dimensions: 100 x 3.0 mm
Part No.: 00D-4633-Y0
Mobile Phase: A: 0.1 % Formic acid in Water
B: 0.1 % Formic acid in Methanol

Gradient:

Time (min)	% B
0	5
2	75
3	75
3.01	5
5	5

Flow Rate: 0.75 mL/min
Temperature: Ambient
Detection: MS
Sample: 1. 3-Hydroxycotinine
2. Nornicotine
3. Cotinine
4. Anabasine
5. Nicotine

High pH



Column: Kinetex 5 µm EVO C18
Dimensions: 100 x 3.0 mm
Part No.: 00D-4633-Y0
Mobile Phase: A: 20 mM Ammonium bicarbonate (unadjusted pH ~8.2)
B: Methanol

Gradient:

Time (min)	% B
0	5
2	75
3	75
3.01	5
5	5

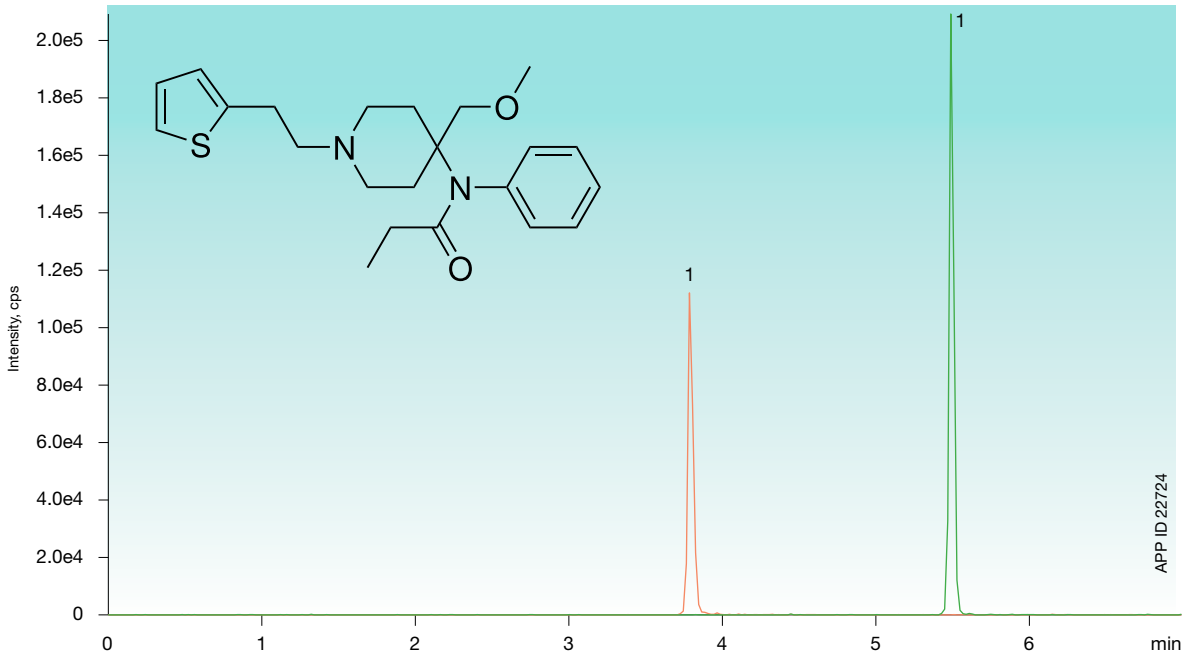
Flow Rate: 0.75 mL/min
Temperature: Ambient
Detection: MS
Sample: 1. 3-Hydroxycotinine
2. Nornicotine
3. Cotinine
4. Anabasine
5. Nicotine

KINETEX
Core-Shell Technology

WONDER

Increased Sensitivity for LC/MS Applications

Alongside LC/UV analyses, the high performance and low pressure of the Kinetex EVO 5 µm make it a tremendous tool for LC/MS and LC/MS/MS. Increased polar basic retention provided by the Kinetex EVO allows for greater use of organic within the mobile phase, subsequently leading to improved ionization and increased sensitivity.



Column: Kinetex 5 µm EVO C18
Dimensions: 50 x 3.0 mm
Part No.: 00B-4633-Y0

Mobile Phase: A: 0.1 % Formic acid in Water
B: 0.1 % Formic acid in Methanol

Gradient:

Time (min)	% B
0	5
2	75
3	75
3.01	5
5	5

Mobile Phase: A: 20 mM Ammonium Bicarbonate (pH 8.2)
B: Methanol

Gradient:

Time (min)	% B
0	5
2	75
3	75
3.01	5
5	5

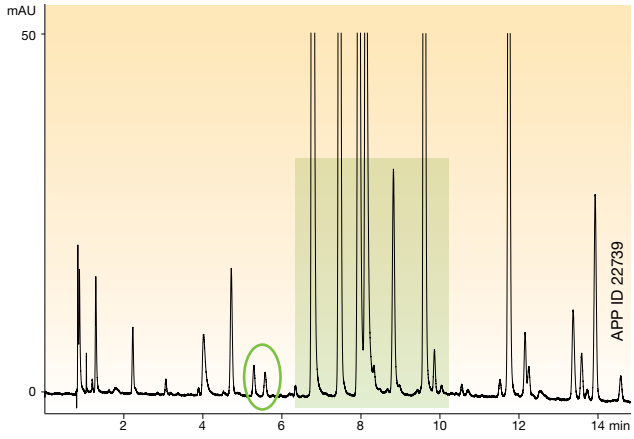
Flow Rate: 0.75 mL/min
Temperature: Ambient
Detection: MS
Sample: 1. Sufentanil

DESIRE

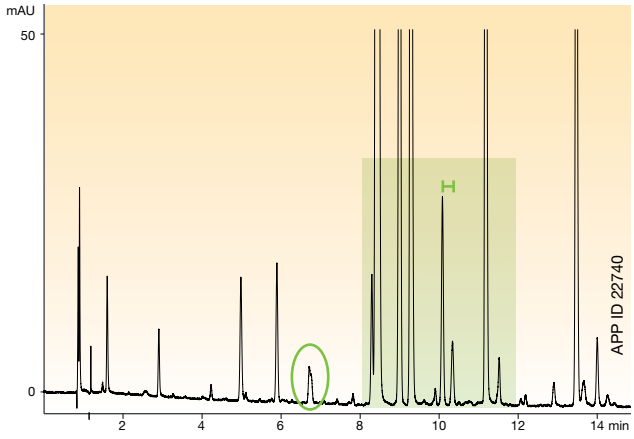
The 3 Best C18 Columns For You

With more C18's on the market than any other phase, it's important to understand how the best ones can benefit you! Switch between the combination of the all-purpose Kinetex® C18 and butyl side chain bonded XB-C18 to get small defined changes in retention and selectivity. Use the Kinetex EVO for enhanced peak shape of bases and extra alkaline pH stability.

Kinetex 5 µm EVO C18



Kinetex 5 µm XB-C18



Conditions for all columns:

Column: Kinetex 5 µm EVO C18
Kinetex 5 µm XB-C18
Kinetex 5 µm C18

Dimensions: 150 x 4.6 mm

Mobile Phase: A: 20 mM Potassium phosphate (pH 2.3)
B: Acetonitrile

Gradient: 5-50 % B in 20 minutes

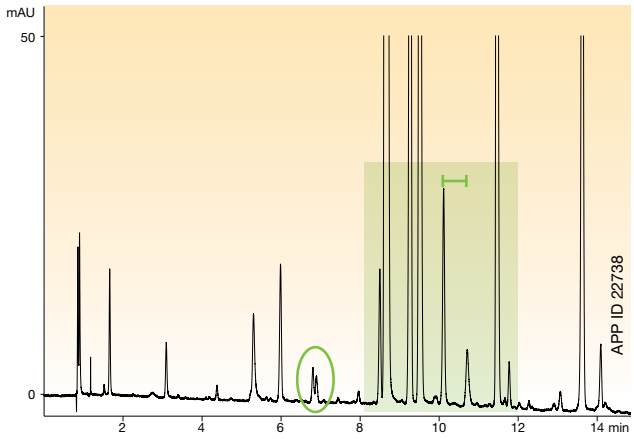
Flow Rate: 1.5 mL/min

Temperature: 30 °C

Detection: UV @ 254 nm

Sample: Nutraceutical Mix

Kinetex 5 µm C18



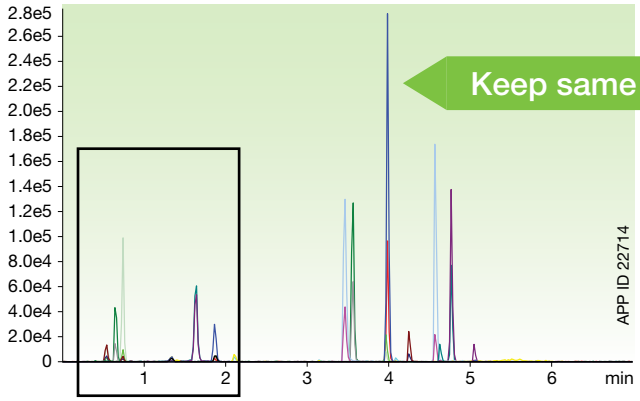
KINETEX
Core-Shell Technology

DESIRE

Built For Your Needs

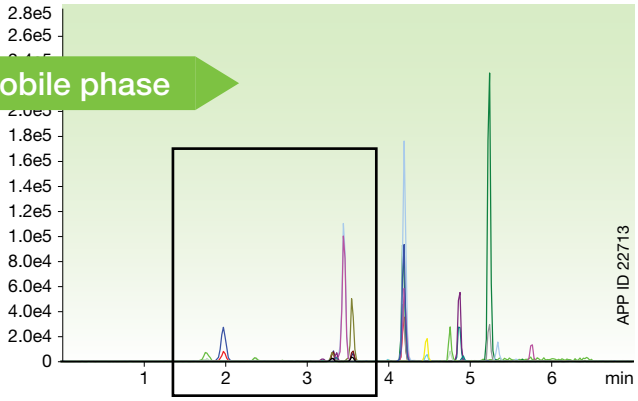
Two exceptional selectivities give you retention enhancement without performance loss. Use the multi-functional Kinetex Biphenyl or pH stable Kinetex EVO C18 to reach the desired solution for your method.

Kinetex 5 µm C18



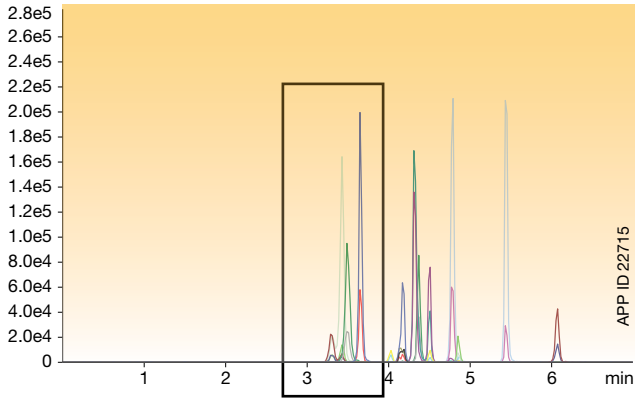
Keep same mobile phase

Kinetex 5 µm Biphenyl



Switch to high pH mobile phase

Kinetex 5 µm EVO C18



Conditions for all columns:

Column:	Kinetex 5 µm C18 Kinetex 5 µm Biphenyl Kinetex 5 µm EVO C18
Dimensions:	50 x 2.1 mm
Mobile Phase:	A: 0.1 % Formic acid in Water B: 0.1 % Formic acid in Methanol
Mobile Phase:	A: 10 mM Ammonium Bicarbonate (pH 8.2) B: Methanol

Gradient:

Time (min)	% B
0	10
0.5	10
2	25
4.5	80
4.51	85
5.5	85
5.51	10
7	10

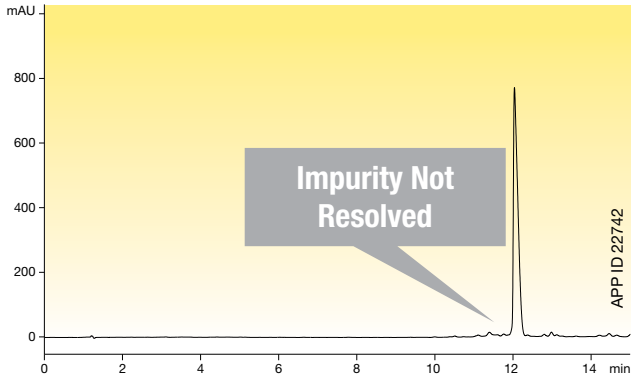
Flow Rate:	0.5 mL/min
Temperature:	Ambient
Detection:	MS/MS (AB SCIEX API 4000)
Sample:	Opiates Mix

ZEST

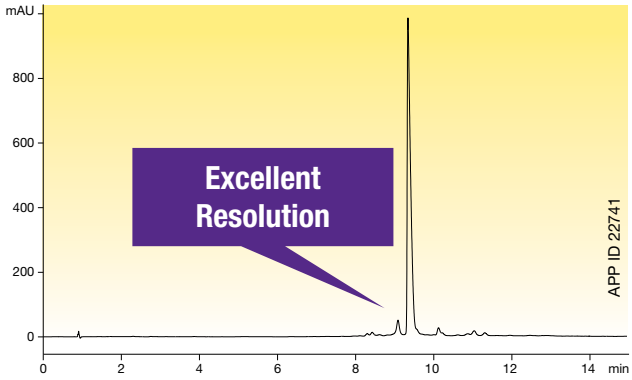
Get Enthusiastic About Prep LC

Reach new levels of purification with the ground-breaking combination of Kinetex® EVO core-shell particles and AXIA™ preparative column technology. This technological combination provides genuine benefits including excellent loadability, high efficiency levels, and incredible pH stability. On top of all this, scaling and method optimization from analytical to prep is a breeze.

Waters® XBridge® 5 µm C18 150 x 4.6 mm

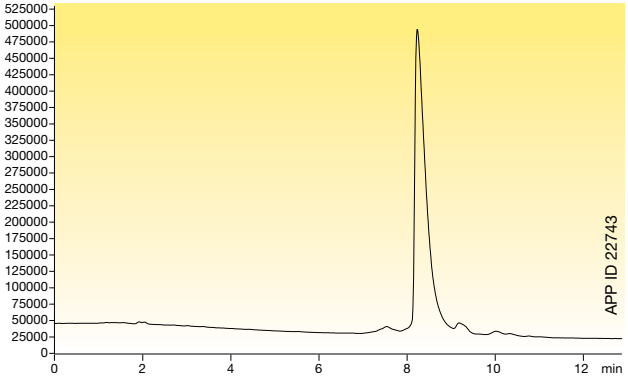


Kinetex 5 µm EVO C18 150 x 4.6 mm



Analytical to PREP Scalability

Kinetex 5 µm EVO C18 150 x 21.2 mm AXIA



Conditions for all columns:

Column: Kinetex 5 µm EVO C18
XBridge 5 µm C18

Dimensions: 150 x 4.6 mm
150 x 21.2 mm (Kinetex AXIA Packed)

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

Gradient: 20 % to 70 % B over 10 minutes

Flow Rate: 1.5 mL/min
30 mL/min (Kinetex AXIA)

Temperature: Ambient

Detection: UV @ 254

Sample: Proprietary Pharmaceutical Sample

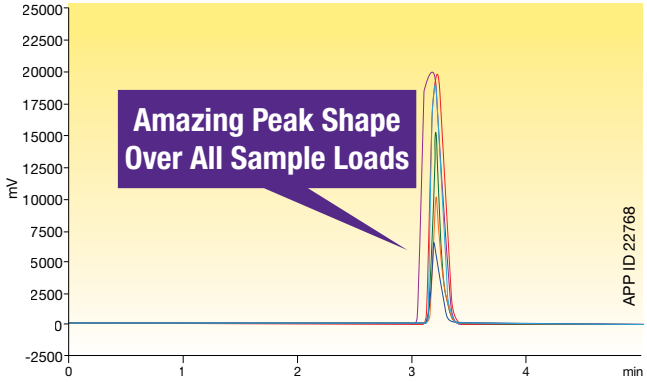
KINETEX®
Core-Shell Technology

ZEST

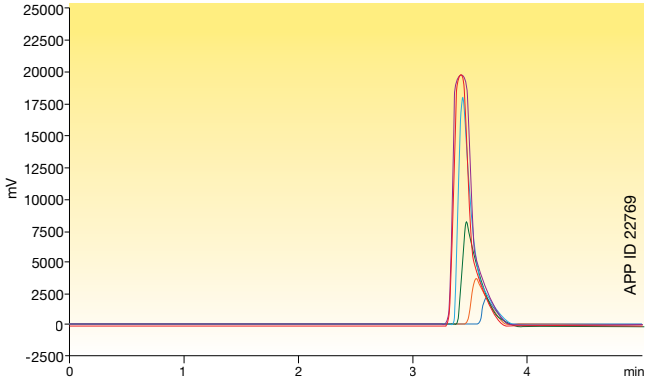
Got an Appetite For Better Results?

Kinetex EVO will easily pave the way to enhanced purification and isolation levels with its incredible pH durability and core-shell performance gains. Get ready for a future of high yields and chromatographic improvements over traditional fully porous and hybrid materials.

Kinetex 5µm EVO C18
150 x 21.2mm AXIA™



Waters® Xbridge® 5µm C18
150 x 19mm Prep OBD™



Conditions for all columns:

Column: Kinetex 5µm EVO C18 Axia packed
XBridge 5µm C18 Prep OBD

Dimensions: 150 x 21.2mm (Kinetex)
150 x 19mm (XBridge)

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

Gradient: 5-95% B in 4 min.
Hold for 1 min.
Re-equilibrate for 2 min.

Flow Rate: 25mL/min

Temperature: Ambient

Detection: UV @ 254

Sample: 1. Amitriptyline

Sample Load:
- 2mg
- 4mg
- 10mg
- 20mg
- 40mg
- 80mg

Get Method Development Flexibility For Your Small Molecule Analysis

Recommended Selectivities If You're Working With:

Acids
Kinetex® C18
Kinetex XB-C18
Kinetex Phenyl-Hexyl

Bases
Kinetex EVO C18
Kinetex XB-C18
Kinetex Biphenyl

Neutrals
Kinetex C18
Kinetex C8
Kinetex Biphenyl

Aromatics
Kinetex Biphenyl
Kinetex Phenyl-Hexyl
Kinetex C18

Acids, Bases, and Neutrals
Kinetex C18
Kinetex Biphenyl
Kinetex EVO C18

Highly Polar Compounds
Kinetex EVO C18
Kinetex C18
Kinetex Biphenyl
Kinetex HILIC

High pH
Kinetex EVO C18

Upgrading Your Fully Porous Methods:

Fully Porous 3 µm or 5 µm

- **5 µm Kinetex or Kinetex EVO** – Drop-in for easy performance improvements with no backpressure increase
- **2.6 µm Kinetex** – Dramatically improve results with efficiency/peak capacity gains

Fully Porous sub-2 µm

- **2.6 µm Kinetex** – Get similar efficiencies at lower backpressure allowing for greater productivity gains
- **1.7 µm Kinetex** – Up to 20 % greater efficiencies resulting in drop-in improvements
- **1.3 µm Kinetex** – Incredible efficiency gains on high end UHPLC systems

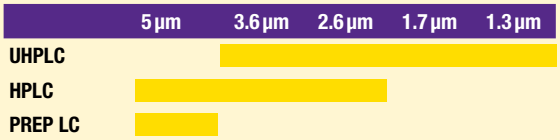
Fully Porous Preparative LC

- **5 µm Kinetex or Kinetex EVO** – Drop-in for easy performance improvement with no backpressure increase

KINETEX®
Core-Shell Technology

Choosing The Best Core-Shell Platform For You is Easy!

For Small Molecules



Material	Phase	Best Use	pH Stability	Available Particle Size(s)			
Kinetex EVO	C18	Robust reversed phase methods even in alkaline conditions with improved peak shape for polar basic compounds	1 - 12	5 µm			
Kinetex	C18	All purpose phase that offers the hydrophobic retention and methylene selectivity chromatographers expect from a C18 column	1.5 - 8.5*	5 µm	2.6 µm	1.7 µm	1.3 µm
	XB-C18	C18 phase with protective butyl side chains for improved peak shape for basic compounds under neutral and acidic conditions	1.5 - 8.5*	5 µm	2.6 µm	1.7 µm	
	C8	USP L7 phase that provides less hydrophobic and methylene selectivity than a C18	1.5 - 8.5*	5 µm	2.6 µm	1.7 µm	
	Biphenyl	100% aqueous stable and allows for excellent reversed phase retention and enhanced polar and aromatic selectivity	1.5 - 8.5*	5 µm	2.6 µm	1.7 µm	
	Phenyl-Hexyl	Reversed phase chemistry that allows for greater retention and separation of aromatic hydrocarbons	1.5 - 8.5*	5 µm	2.6 µm	1.7 µm	
	HILIC	Unbonded silica phase for HILIC conditions to provide selectivity for polar compounds	2.0 - 7.5	5 µm	2.6 µm	1.7 µm	

Phenomenex Application Specific Core-Shell Products

Material	Phase	Best Use	pH Stability	Available Particle Size(s)			
For Peptides (≤ 10,000 Da)							
Aeris™ PEPTIDE	XB-C18	Excellent hydrophobicity and methylene selectivity for peptide and peptide mapping separations	1.5 - 9.0	5 µm	3.6 µm	2.6 µm	1.7 µm
For Proteins (≥ 10,000 Da)							
Aeris WIDEPORE	XB-C18	Maximum hydrophobicity and high temp stability for hydrophilic and PEGylated proteins	1.5 - 9.0	3.6 µm			
	XB-C8	Medium hydrophobicity and high temp stability for moderately hydrophobic proteins and glycosylated proteins	1.5 - 9.0	3.6 µm			
	C4	Lowest hydrophobicity for very large or very hydrophobic proteins	1.5 - 9.0	3.6 µm			
For Synthetic Oligonucleotides (DNA/RNA)							
Clarity® Oligo-MS™	C18	Rapid, high efficiency reversed phase LC/MS analysis for QC and characterization	1.5 - 8.5*	2.6 µm	1.7 µm		

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

Ordering Information

5 µm Minibore Columns (mm)					SecurityGuard™ ULTRA Cartridges‡
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
EVO C18	—	00B-4633-AN	00D-4633-AN	00F-4633-AN	AJ0-9298
Biphenyl	00A-4627-AN	00B-4627-AN	00D-4627-AN	—	AJ0-9209
XB-C18	00A-4605-AN	00B-4605-AN	00D-4605-AN	—	AJ0-8782
C18	00A-4601-AN	00B-4601-AN	00D-4601-AN	00F-4601-AN	AJ0-8782
C8	—	00B-4608-AN	00D-4608-AN	—	AJ0-8784
Phenyl-Hexyl	—	00B-4603-AN	00D-4603-AN	—	AJ0-8788
					for 2.1 mm ID

5 µm MidBore™ Columns (mm)				SecurityGuard ULTRA Cartridges‡
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
EVO C18	00B-4633-Y0	00D-4633-Y0	00F-4633-Y0	AJ0-9297
Biphenyl	00B-4627-Y0	00D-4627-Y0	00F-4627-Y0	AJ0-9208
XB-C18	00B-4605-Y0	00D-4605-Y0	00F-4605-Y0	AJ0-8775
C18	00B-4601-Y0	00D-4601-Y0	00F-4601-Y0	AJ0-8775
C8	00B-4608-Y0	00D-4608-Y0	—	AJ0-8777
Phenyl-Hexyl	00B-4603-Y0	00D-4603-Y0	—	AJ0-8781
				for 3.0 mm ID

5 µm Analytical Columns (mm)					SecurityGuard ULTRA Cartridges‡
Phases	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/pk
EVO C18	00B-4633-E0	00D-4633-E0	00F-4633-E0	00G-4633-E0	AJ0-9296
Biphenyl	00B-4627-E0	00D-4627-E0	00F-4627-E0	00G-4627-E0	AJ0-9207
XB-C18	00B-4605-E0	00D-4605-E0	00F-4605-E0	00G-4605-E0	AJ0-8768
C18	00B-4601-E0	00D-4601-E0	00F-4601-E0	00G-4601-E0	AJ0-8768
C8	00B-4608-E0	00D-4608-E0	00F-4608-E0	00G-4608-E0	AJ0-8770
Phenyl-Hexyl	00B-4603-E0	00D-4603-E0	00F-4603-E0	00G-4603-E0	AJ0-8774
					for 4.6 mm ID

5 µm Semi-Preparative Columns (mm)			SecurityGuard SemiPrep Cartridges***
Phases	150 x 10	250 x 10	10 x 10
			/3pk
C18	00F-4601-N0	00G-4601-N0	AJ0-9278
Biphenyl	00F-4627-N0	00G-4627-N0	AJ0-9280
			for 10 mm ID

5 µm Axia™ Packed Preparative Columns (mm)					SecurityGuard PREP Cartridges*
Phases	50 x 21.2	100 x 21.2	150 x 21.2	250 x 21.2	15 x 21.2
					/ea
EVO C18	00B-4633-P0-AX	00D-4633-P0-AX	00F-4633-P0-AX	00G-4633-P0-AX	AJ0-9304
					/ea
Biphenyl	00B-4627-P0-AX	00D-4627-P0-AX	00F-4627-P0-AX	00G-4627-P0-AX	AJ0-9272
XB-C18	00B-4605-P0-AX	00D-4605-P0-AX	00F-4605-P0-AX	00G-4605-P0-AX	AJ0-9145
C18	00B-4601-P0-AX	00D-4601-P0-AX	00F-4601-P0-AX	00G-4601-P0-AX	AJ0-9145
C8	00B-4608-P0-AX	00D-4608-P0-AX	00F-4608-P0-AX	00G-4608-P0-AX	AJ0-9205
Phenyl-Hexyl	00B-4603-P0-AX	00D-4603-P0-AX	00F-4603-P0-AX	00G-4603-P0-AX	AJ0-9147
HILIC	—	00D-4606-P0-AX	00F-4606-P0-AX	00G-4606-P0-AX	AJ0-9277
					for 21.2 mm ID

5 µm Axia Packed Preparative Columns (mm)					SecurityGuard PREP Cartridges**
Phases	50 x 30	100 x 30	150 x 30	250 x 30	15 x 30
					/ea
Biphenyl	—	—	00F-4627-U0-AX	—	AJ0-9273
XB-C18	00B-4605-U0-AX	00D-4605-U0-AX	00F-4605-U0-AX	00G-4605-U0-AX	AJ0-9204
C18	00B-4601-U0-AX	00D-4601-U0-AX	00F-4601-U0-AX	00G-4601-U0-AX	AJ0-9204
C8	00B-4608-U0-AX	00D-4608-U0-AX	00F-4608-U0-AX	00G-4608-U0-AX	AJ0-9217
Phenyl-Hexyl	00B-4603-U0-AX	00D-4603-U0-AX	00F-4603-U0-AX	00G-4603-U0-AX	AJ0-9216
					for 30 mm ID

guarantee

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

‡ SecurityGuard ULTRA Cartridges require holder, Part No.: AJ0-9000
* PREP SecurityGuard Cartridges require holder, Part No.: AJ0-8223
** PREP SecurityGuard Cartridges require holder, Part No.: AJ0-8277
*** SemiPrep SecurityGuard Cartridges require holder, Part No.: AJ0-9281

Ordering Information

2.6 µm Minibore Columns (mm)						SecurityGuard ULTRA Cartridges‡
Phases	30 x 2.1	50 x 2.1	75 x 2.1	100 x 2.1	150 x 2.1	3/pk
Biphenyl	00A-4622-AN	00B-4622-AN	—	00D-4622-AN	00F-4622-AN	AJ0-9209
XB-C18	00A-4496-AN	00B-4496-AN	00C-4496-AN	00D-4496-AN	00F-4496-AN	AJ0-8782
C18	00A-4462-AN	00B-4462-AN	00C-4462-AN	00D-4462-AN	00F-4462-AN	AJ0-8782
C8	00A-4497-AN	00B-4497-AN	00C-4497-AN	00D-4497-AN	00F-4497-AN	AJ0-8784
HILIC	00A-4461-AN	00B-4461-AN	00C-4461-AN	00D-4461-AN	00F-4461-AN	AJ0-8786
Phenyl-Hexyl	00A-4495-AN	00B-4495-AN	00C-4495-AN	00D-4495-AN	00F-4495-AN	AJ0-8788
						for 2.1 mm ID

2.6 µm MidBore™ Columns (mm)						SecurityGuard ULTRA Cartridges‡
Phases	30 x 3.0	50 x 3.0	75 x 3.0	100 x 3.0	150 x 3.0	3/pk
Biphenyl	—	00B-4622-Y0	—	00D-4622-Y0	00F-4622-Y0	AJ0-9208
XB-C18	00A-4496-Y0	00B-4496-Y0	00C-4496-Y0	00D-4496-Y0	00F-4496-Y0	AJ0-8775
C18	00A-4462-Y0	00B-4462-Y0	00C-4462-Y0	00D-4462-Y0	00F-4462-Y0	AJ0-8775
C8	00A-4497-Y0	00B-4497-Y0	00C-4497-Y0	00D-4497-Y0	00F-4497-Y0	AJ0-8777
HILIC	00A-4461-Y0	—	—	—	00F-4461-Y0	AJ0-8779
Phenyl-Hexyl	—	00B-4495-Y0	—	00D-4495-Y0	00F-4495-Y0	AJ0-8781
						for 3.0 mm ID

2.6 µm Analytical Columns (mm)						SecurityGuard ULTRA Cartridges‡
Phases	30 x 4.6	50 x 4.6	75 x 4.6	100 x 4.6	150 x 4.6	3/pk
Biphenyl	—	00B-4622-E0	—	00D-4622-E0	00F-4622-E0	AJ0-9207
XB-C18	—	00B-4496-E0	00C-4496-E0	00D-4496-E0	00F-4496-E0	AJ0-8768
C18	00A-4462-E0	00B-4462-E0	00C-4462-E0	00D-4462-E0	00F-4462-E0	AJ0-8768
C8	—	00B-4497-E0	00C-4497-E0	00D-4497-E0	00F-4497-E0	AJ0-8770
HILIC	—	00B-4461-E0	00C-4461-E0	00D-4461-E0	00F-4461-E0	AJ0-8772
Phenyl-Hexyl	—	00B-4495-E0	00C-4495-E0	00D-4495-E0	00F-4495-E0	AJ0-8774
						for 4.6 mm ID

1.7 µm Minibore Columns (mm)					SecurityGuard ULTRA Cartridges‡
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
Biphenyl	—	00B-4628-AN	00D-4628-AN	00F-4628-AN	AJ0-9209
XB-C18	00A-4498-AN	00B-4498-AN	00D-4498-AN	00F-4498-AN	AJ0-8782
C18	00A-4475-AN	00B-4475-AN	00D-4475-AN	00F-4475-AN	AJ0-8782
C8	00A-4499-AN	00B-4499-AN	00D-4499-AN	00F-4499-AN	AJ0-8784
HILIC	00A-4474-AN	00B-4474-AN	00D-4474-AN	—	AJ0-8786
Phenyl-Hexyl	—	00B-4500-AN	00D-4500-AN	00F-4500-AN	AJ0-8788
					for 2.1 mm ID

1.7 µm MidBore Columns (mm)				SecurityGuard ULTRA Cartridges‡
Phases	30 x 3.0	50 x 3.0	100 x 3.0	3/pk
XB-C18	00A-4498-Y0	00B-4498-Y0	00D-4498-Y0	AJ0-8775
C18	—	00B-4475-Y0	00D-4475-Y0	AJ0-8775
C8	00A-4499-Y0	00B-4499-Y0	00D-4499-Y0	AJ0-8777
HILIC	—	00B-4474-Y0	—	AJ0-8779
				for 3.0 mm ID

1.3 µm Minibore Columns (mm)		
Phases	30 x 2.1	50 x 2.1
C18	00A-4515-AN	00B-4515-AN

‡ SecurityGuard ULTRA Cartridges require holder, Part No.: AJ0-9000

KINETEX®
Core-Shell Technology

Introducing Kinetex EVO!

- Develop robust methods from pH 1-12
- Get improved peak shape for bases
- Easily reduce run times and increase sensitivity

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