

NEW

 **KINETEX**[®]
Core-Shell Technology



TM

Instantly Improve Your 5 µm and 3 µm Methods
with Kinetex 5 µm.
Guaranteed!*

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



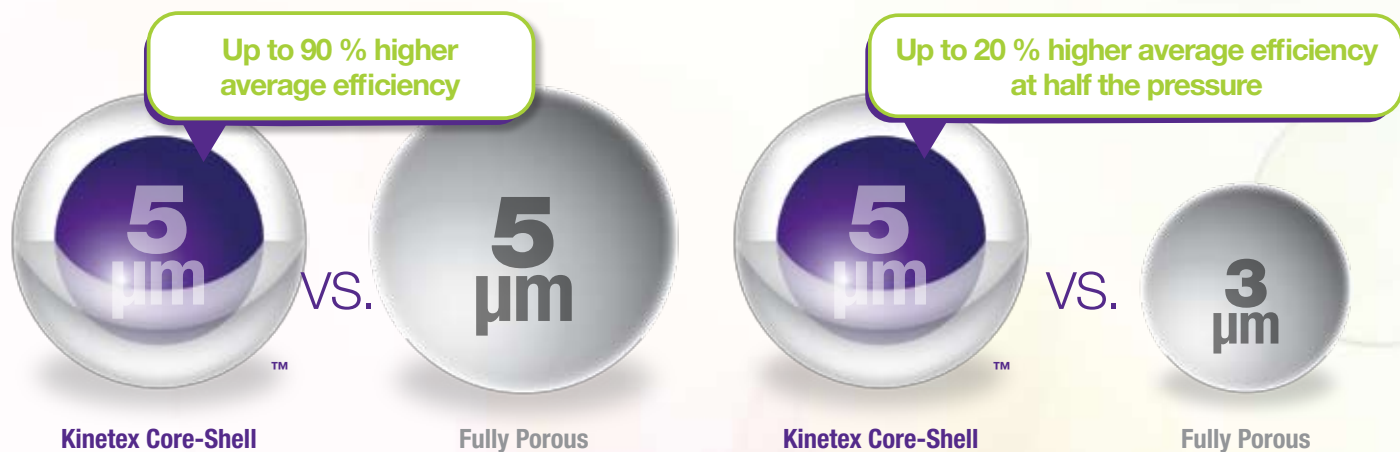
* See ordering information page for complete guarantee details.

NEW

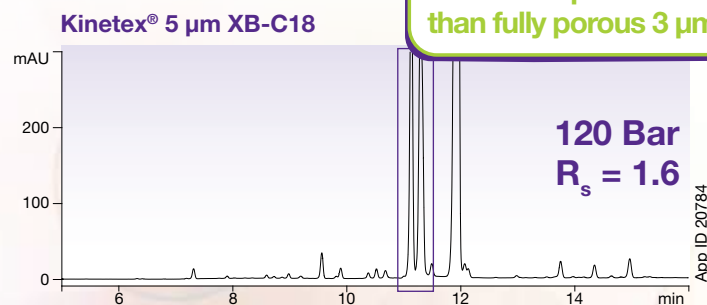
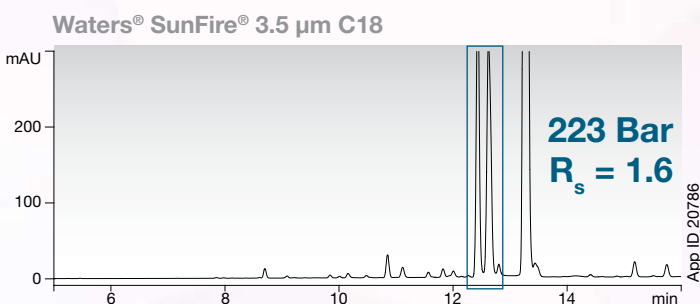
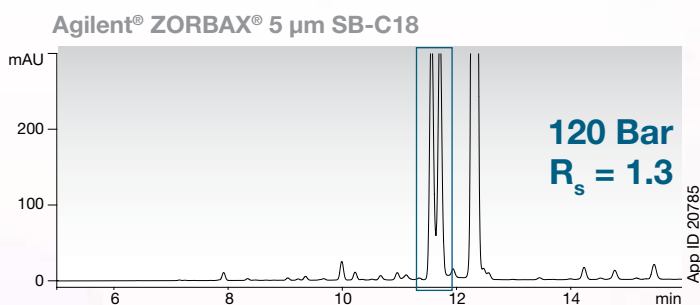
Better Performance than 5 μm and 3 μm Fully Porous Columns with Kinetex 5 μm

Isocratic – Kinetex 5 μm columns have clear efficiency gains over both 5 and 3 μm fully porous columns at 5 μm pressure

Gradient – Kinetex 5 μm columns have 3 μm or better peak capacities at 5 μm pressure



Simple to Use Solution for Improved Performance



23 % Greater resolution than fully porous 5 μm
85 % Less pressure than fully porous 3 μm

Conditions for all columns:

Columns: Kinetex 5 μm XB-C18
ZORBAX 5 μm SB-C18
SunFire 3.5 μm C18

Dimension: 150 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: Pharmaceutical degradation sample

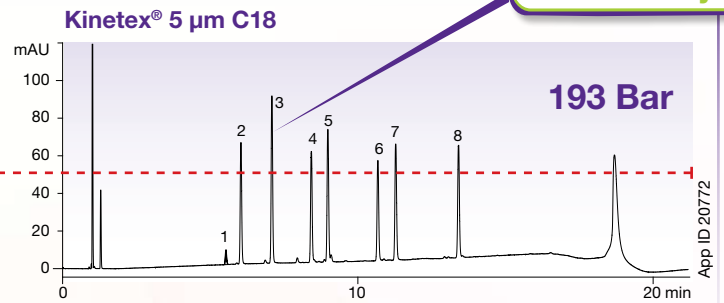
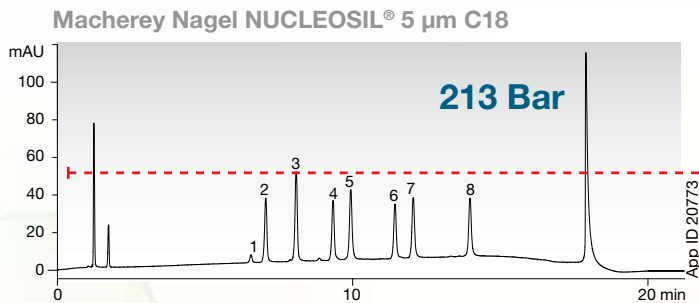
Critical advantages of low HPLC system backpressures with Kinetex 5 μm columns

- Longer column lifetime
- Higher throughput
- Increased system compatibility and method transferability

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Enhanced Sensitivity without Pressure Increase

90% Increase in sensitivity



Conditions for both columns:

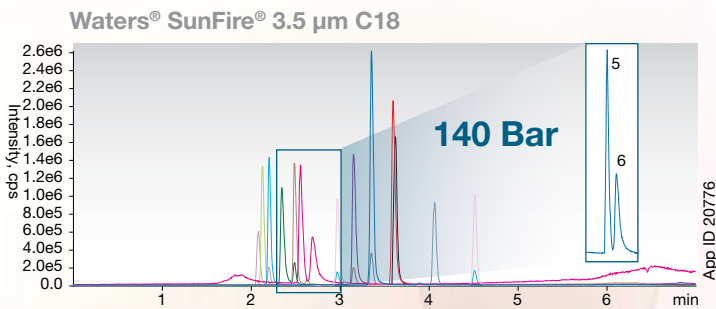
Columns: Kinetex 5 µm C18
NUCLEOSIL 5 µm C18
Dimension: 150 x 4.6 mm
Mobile Phase: A: Milli-Q® Water
B: Acetonitrile
Gradient:

| Time (min) | % B |
|------------|-----|
| 0 | 30 |
| 15 | 95 |
| 16 | 95 |
| 17 | 30 |
| 20 | 30 |

Flow Rate: 1.5 mL/min
Temperature: Ambient
Detection: UV @ 205 nm
Sample: 1. 6-Gingerol (1) 5. 6-Shogaol
2. 6-Gingerol (2) 6. 10-Gingerol
3. Capsaicin 7. 8-Shogaol
4. 8-Gingerol 8. 10-Shogaol

Increased Resolution at a Fraction of the Pressure

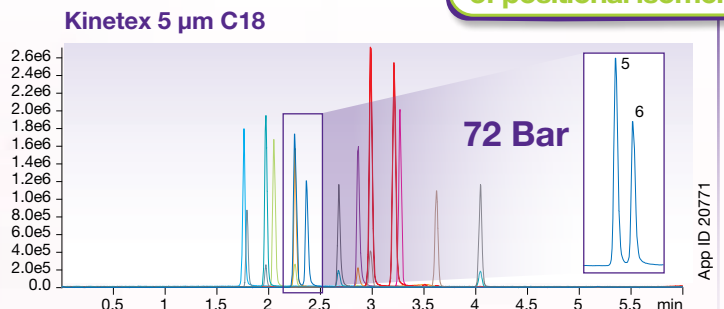
Baseline separation of positional isomers



Conditions for both columns:

Columns: Kinetex 5 µm C18
SunFire 3.5 µm C18
Dimension: 50 x 2.1 mm
Mobile Phase: A: 30 mM Ammonium formate
B: Acetonitrile
Gradient:

| Time (min) | % B |
|------------|-----|
| 0 | 5 |
| 5 | 60 |
| 5.1 | 100 |
| 6 | 100 |
| 7 | 5 |

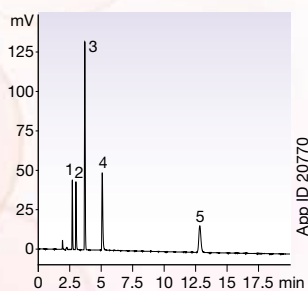


Flow Rate: 0.5 mL/min
Temperature: Ambient
Detection: MS/MS (API 4000™)
Sample: 1. DMIP 8. Harman
2. IQx 9. Norharman
3. IQ 10. PhiP
4. 8-MeIQ 11. AaC
5. 4,8-DiMe-Iqx 12. MeAaC
6. 7,8-DiMe-Iqx 13. MeIQ
7. Trp-P-2

Analytical Scalability and Portability HPLC to UHPLC

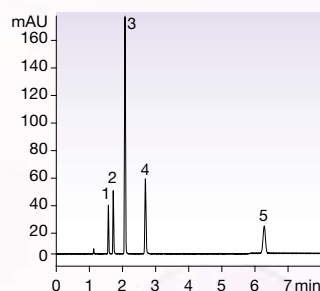
No change in selectivity

Kinetex 5 µm C18
on Shimadzu® LC-20A



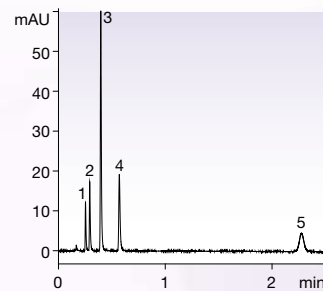
Columns: Kinetex 5 µm C18
Dimension: 250 x 4.6 mm
Part No.: 00G-4601-E0

Kinetex 2.6 µm C18
on Agilent® 1100



Columns: Kinetex 2.6 µm C18
Dimension: 150 x 4.6 mm
Part No.: 00F-4462-E0

Kinetex 1.7 µm C18
on Agilent 1290

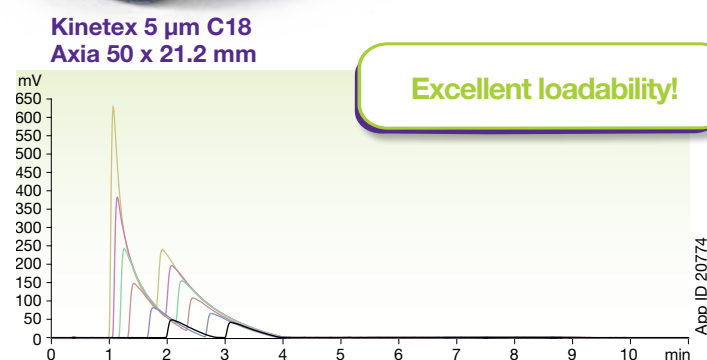
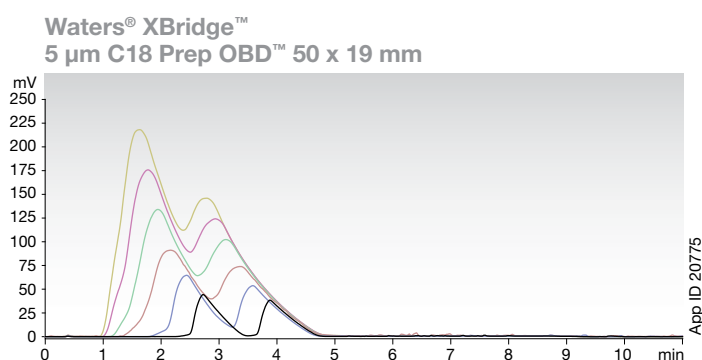


Columns: Kinetex 1.7 µm C18
Dimension: 50 x 3.0 mm
Part No.: 00B-4475-Y0
Mobile Phase: 680:320:2

Conditions are same except as noted:
Mobile Phase: Water/Acetonitrile/Phosphoric acid (600:400:2)
Flow Rate: 1 mL/min
Temperature: Ambient
Detection: UV @ 237
Sample: 1. Impurity A
2. Impurity B
3. Impurity C
4. Acetylsalicylic acid
5. Impurity D

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

In addition to being completely scalable with the Kinetex® 1.7 and 2.6 µm particles, the Kinetex 5 µm column is now available in the revolutionary Axia preparative format. Axia packed Kinetex 5 µm columns will provide incredible gains in efficiency and performance for all your reversed phase preparative chromatography methods.



Conditions for both columns:
Columns: Kinetex 5 µm C18
 XBridge 5 µm C18
Dimension: 50 x 21.2 mm
 50 x 19 mm
Mobile Phase: A: Water with 0.5 % Formic acid
 B: Acetonitrile with 0.5 % Formic acid
Gradient:

| Time (min) | % B |
|------------|-----|
| 0 | 20 |
| 8 | 50 |
| 11 | 50 |

Flow Rate: 30 mL/min
Temperature: Ambient
Detection: UV @ 254 nm
Sample: 1. Doxepin (From 1 - 500 mg on column)
 2. Amitriptyline (From 1 - 500 mg on column)

Ordering Information

| NEW! 5 µm Columns (mm) | SecurityGuard™ ULTRA Cartridges* | | | | | SecurityGuard™ ULTRA Cartridges* | |
|---------------------------|-------------------------------------|----------|-------------|-------------|-------------|-------------------------------------|-----------|
| | 50 x 2.1 | 3/pk | 50 x 4.6 | 100 x 4.6 | 150 x 4.6 | | 250 x 4.6 |
| XB-C18 | 00B-4605-AN | AJ0-8782 | 00B-4605-E0 | 00D-4605-E0 | 00F-4605-E0 | 00G-4605-E0 | AJ0-8768 |
| C18 | 00B-4601-AN | AJ0-8782 | 00B-4601-E0 | 00D-4601-E0 | 00F-4601-E0 | 00G-4601-E0 | AJ0-8768 |
| PPF | 00B-4602-AN | AJ0-8787 | 00B-4602-E0 | 00D-4602-E0 | 00F-4602-E0 | 00G-4602-E0 | AJ0-8773 |
| Phenyl-Hexyl | 00B-4603-AN | AJ0-8788 | 00B-4603-E0 | 00D-4603-E0 | 00F-4603-E0 | 00G-4603-E0 | AJ0-8774 |

* SecurityGuard ULTRA cartridges require holder, Part No. AJ0-9000. for 4.6 mm ID

NEW!
5 µm Axia Packed Preparative Columns (mm)

| | 50 x 21.2 | 100 x 21.2 | 150 x 21.2 | 250 x 21.2 |
|---------------------|----------------|----------------|----------------|----------------|
| XB-C18 | 00B-4605-P0-AX | 00D-4605-P0-AX | 00F-4605-P0-AX | 00G-4605-P0-AX |
| C18 | 00B-4601-P0-AX | 00D-4601-P0-AX | 00F-4601-P0-AX | 00G-4601-P0-AX |
| PPF | 00B-4602-P0-AX | 00D-4602-P0-AX | 00F-4602-P0-AX | 00G-4602-P0-AX |
| Phenyl-Hexyl | 00B-4603-P0-AX | 00D-4603-P0-AX | 00F-4603-P0-AX | 00G-4603-P0-AX |



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.

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