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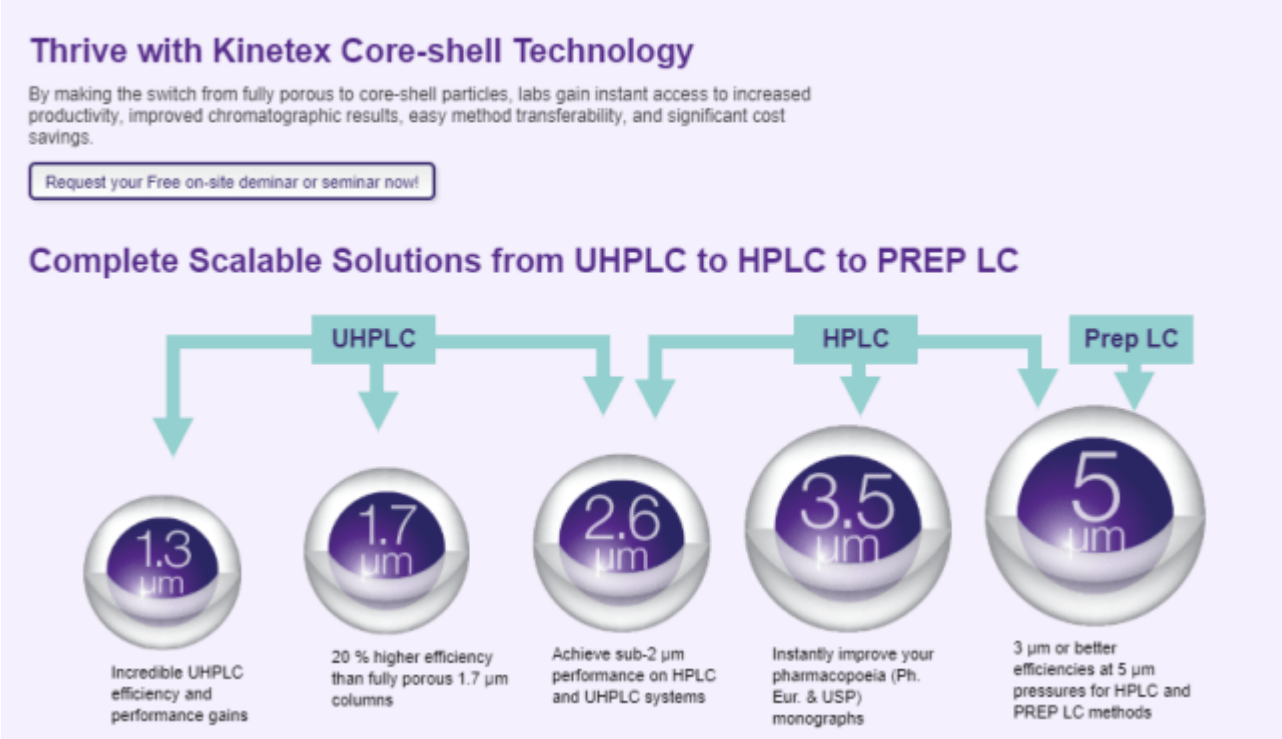
- 100% Aqueous Stability
- Available in 2.6 µm for UHPLC and HPLC

By making the switch from fully porous to core-shell particles, labs gain instant access to increased productivity, improved chromatographic results, easy method transferability, and significant cost savings.



But don't take our word for it! Check out our application notes of how Kinetex PS C18 performed compared to a conventional fully porous UHPLC columns and achieves your desired LC selectivity. Click the link or image below to keep reading: CLICK HERE

Summary of "Kinetex® 2.6µm PS C18 Core-Shell Column's Chromatographic Performance and Unique Reversed Phase Selectivity in Comparison to a Conventional Fully Porous UHPLC Column"

"Our scientists wanted to investigate the Kinetex 2.6µm PS C18 HPLC/UHPLC column's improved chromatographic performance and unique multi interaction selectivity when applied to a screen of 36 tricyclic antidepressants. Both columns tested were of the same dimension (100 x 2.1mm) and ran under identical conditions, on the same UHPLC system, and during the same period of time. The gradient consisted of Water with 0.1% Formic acid as the weak solvent and Acetonitrile with 0.1% Formic acid as the strong organic solvent. A flow rate of 0.5mL/min was used, and the column heater was set to an ambient temperature of 25°C. An Agilent® 1200 HPLC system was used for the investigation with a SCIEX™ API 4000™ mass spectrometer (MS) for detection. The Kinetex PS C18 is a USP classified L1 column, that provides both a unique polar and non-polar selectivity as well as 100% aqueous stability."

APPLICATIONS

Kinetex® 2.6µm PS C18 Core-Shell Column's Chromatographic Performance and Unique Reversed Phase Selectivity in Comparison to a Conventional Fully Porous UHPLC Column

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Phenomenex, Inc., 411 Madrid Ave, Torrance CA 90501 USA

Overview

In this application, we investigated the Kinetex 2.6µm PS C18 HPLC/UHPLC column's improved chromatographic performance and unique multi-interaction selectivity when applied to a screen of 36 tricyclic antidepressants (TCA). Because the Kinetex 2.6µm core-shell (superficially porous) particle morphology provides ultra-high column efficiency on any HPLC or UHPLC system[1], the investigation also included a comparison to a conventual fully porous 1.9µm UHPLC column.

Both columns tested were of the same dimension (100 x 2.1 mm) and ran under identical conditions, on the same UHPLC system, and during the same period of time. The gradient consisted of Water with 0.1 % Formic acid as the weak solvent and Acetonitrile with 0.1 % Formic acid as the strong organic solvent. A flow rate of 0.5 mL/min was used, and the column heater was set to an ambient temperature of 25 °C. An Agilent® 1200 HPLC system was used for the investigation with a SCIEX™ API 4000™ mass spectrometer (MS) for detection.

The Kinetex PS C18 is a USP classified L1 column, that provides both a unique polar and non-polar selectivity as well as 100 % aqueous stability.[2]

Kinetex PS C18

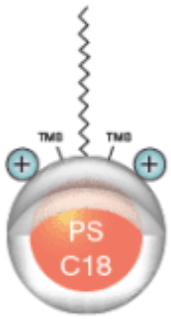

Table 1.
36 Tricyclic Antidepressants (TCA)

Q1	Q3	TCA
197.0	117.9	1,3-chlorphenylpiperazine
278.1	105.0	Amitriptyline
314.0	270.9	Amoxapine
256.0	129.9	Hydroxybupropion
325.1	109.9	Citalopram
331.1	109.0	Citalopram-D6
264.1	91.0	Nortriptyline
267.1	105.0	Nortriptyline-D3
311.1	109.0	Desmethylcitalopram
315.1	86.0	Clomipramine
301.0	72.0	Desmethylclomipramine
267.1	72.0	Desipramine
280.1	107.0	Doxepin
266.1	106.9	Desmethyldoxepin
298.0	153.9	Duloxetine
310.0	147.9	Fluoxetine
296.0	133.9	Norfluoxetine
319.1	71.0	Fluvoxamine
305.0	229.0	Norfluvoxamine
281.1	86.0	Imipramine
284.1	89.0	Imipramine-D3
278.1	191.0	Maprotiline
266.1	195.0	Mirtazapine
330.1	192.0	Paroxetine
264.1	191.0	Protriptyline
306.0	158.8	Sertraline
292.0	158.8	Desmethylsertraline
372.1	176.0	Trazodone
378.1	182.0	Trazodone-D6
295.1	100.0	Trimipramine
278.1	58.0	Venlafaxine
284.1	64.0	Venlafaxine-D6
264.1	58.1	Desmethylvenlafaxine
270.1	64.1	Desmethylvenlafaxine-D6
442.1	154.9	Vilazodone
299.1	149.9	Vortioxetine

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