

APPLICATIONS

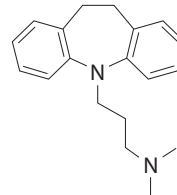
Improved Loading for Impurity Profiling of Basic Compounds using the Kinetex[®] PS C18 HPLC/UHPLC Column

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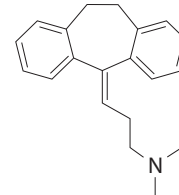
Overview

The Kinetex PS C18 is the latest addition to the Kinetex core-shell HPLC/UHPLC column family. The phase's selectivity has been empirically demonstrated to be well suited for the analysis of different classes of acid, bases, and natural compounds under typical reversed phase conditions. However, the Kinetex PS C18 selectivity is particularly applicable for the analysis of polar basic compounds that contain basic functionality and typically exhibit poor selectivity/peak performance on traditional C18 phases. Traditional alkyl C18 phases are prone to peak tailing issues for basic compounds due to uncontrolled secondary interactions occurring at the silica surface. The surface of the Kinetex PS C18 contains bonded positive charges that serve to repel basic species and deliver consistently sharper peak shape for basic compounds. Additionally, the phase is stable under 100% aqueous conditions, allowing for greater method development flexibility.

Imipramine
LogP: 4.28



Amitriptyline
LogP: 4.81

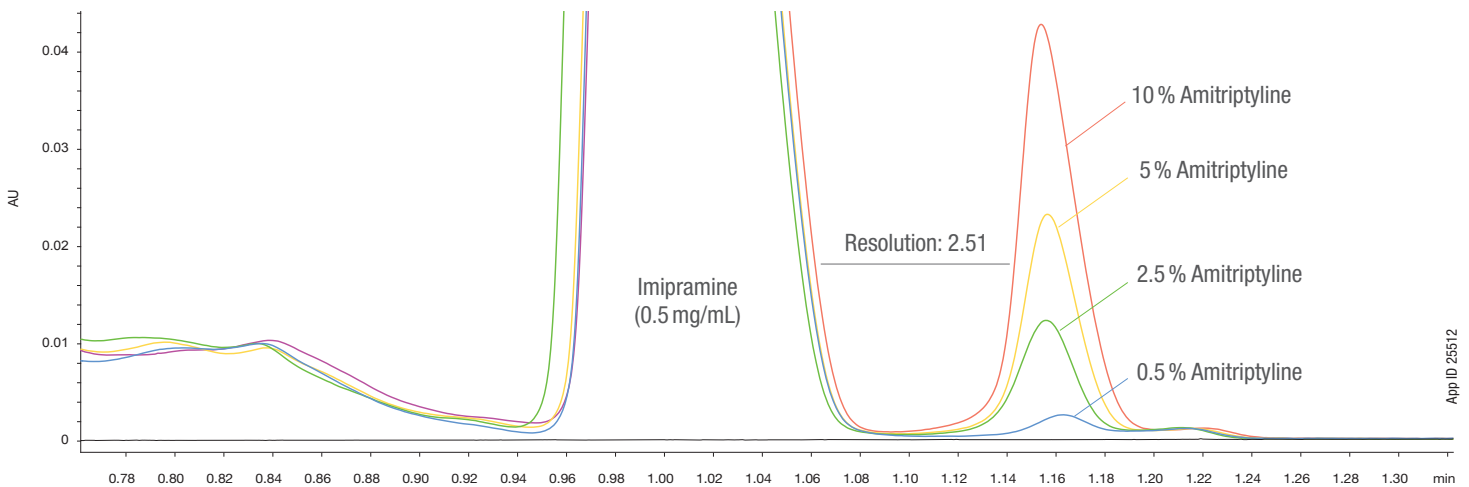


Conditions for all examples:

Columns:	Kinetex 2.6 μm PS C18 Core-Shell 2.6 μm C18												
Dimensions:	50 x 4.6 mm												
Part No.:	00B-4780-E0												
Mobile Phase:	A: Methanol B: Acetonitrile with 0.1% Formic Acid												
Gradient:	<table border="1"> <thead> <tr> <th>Time (min)</th> <th>% B</th> </tr> </thead> <tbody> <tr><td>0</td><td>25</td></tr> <tr><td>2</td><td>35</td></tr> <tr><td>3</td><td>95</td></tr> <tr><td>3.1</td><td>25</td></tr> <tr><td>5</td><td>25</td></tr> </tbody> </table>	Time (min)	% B	0	25	2	35	3	95	3.1	25	5	25
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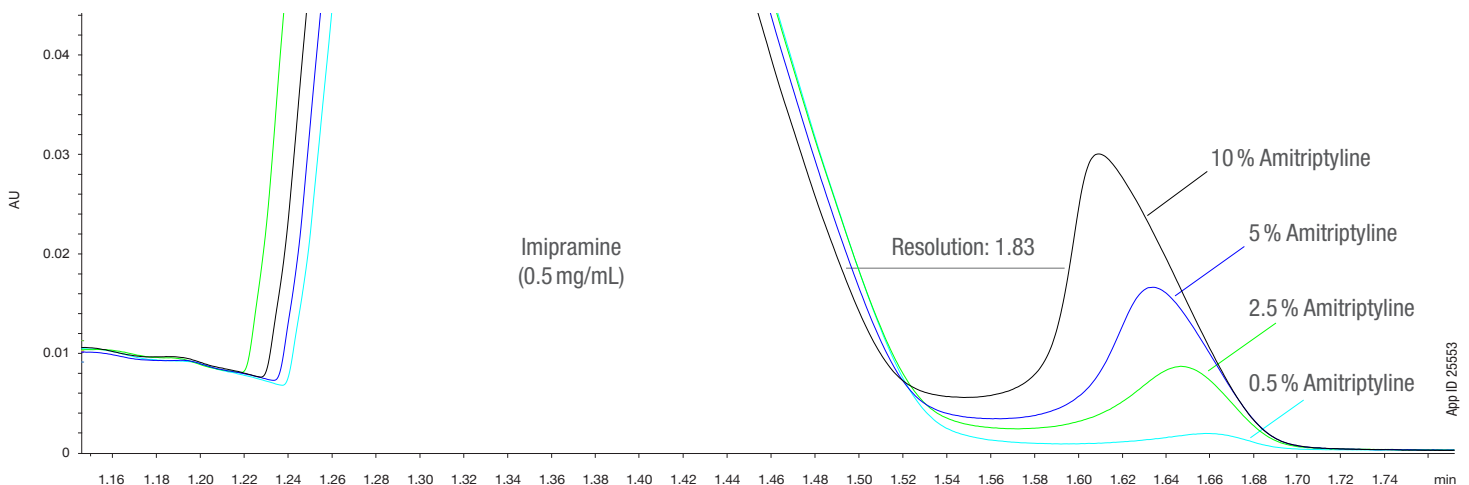
Flow Rate:	1.85 mL/min
Temperature:	Ambient
Detector:	UV @ 254 nm
Sample:	1. Imipramine 2. Amitriptyline

Kinetex 2.6 μm PS C18



App ID 25512

Core-Shell 2.6 μm C18



App ID 25563

Kinetex® Core-Shell LC Column Ordering Information

2.6 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
PS C18	00A-4780-AN	00B-4780-AN	00D-4780-AN	00F-4780-AN	AJO-8951

for 2.1 mm ID

2.6 µm MidBore™ Columns (mm)				SecurityGuard™ ULTRA Cartridges†
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
PS C18	00B-4780-YO	00D-4780-YO	00F-4780-YO	AJO-8950

for 3.0 mm ID

2.6 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
PS C18	00B-4780-E0	00D-4780-E0	00F-4780-E0	00G-4780-E0	AJO-8949

for 4.6 mm ID

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

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