

APPLICATION

100% Aqueous Stability of Kinetex® EVO C18 Core-Shell LC Columns

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Overview

An example of the 100 % aqueous stability of Kinetex EVO C18 core-shell columns is shown below. This particular benefit can be very advantageous in aiding the retention and resolution of problematic polar compounds that typically have poor retention under reversed phase conditions. Traditional alkyl chain stationary phases collapse with the use of 100% aqueous conditions. However the unique, patented organo-silica grafting process used within the manufacturing of the new Kinetex EVO C18 promotes both pH and aqueous stability. Incorporated uniform stabilizing ethane cross-linking provides resistance to high pH attack and maintains mechanical strength of the Kinetex core-shell particle. Likewise the deposition of a slight positive charge on the surface of the particle further improves basic compound peak shape with repulsion interactions and promotes aqueous stability in the same manner as seen with traditional polar endcapping. With excellent efficiency levels assured in aqueous or pH 1-12 conditions by the ruggedness and morphology of Kinetex EVO C18 core-shell columns, the opportunity to change the dynamic of traditional method development is within reach.

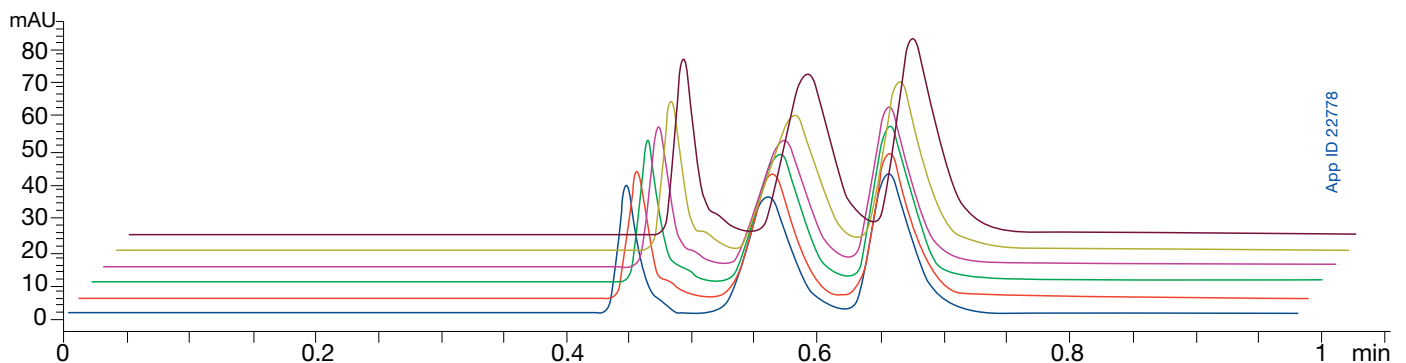


Injection Nos.:



HPLC Conditions

Column: Kinetex 5 µm EVO C18
Dimensions: 50 x 4.6 mm
Part No.: 00B-4633-E0
Mobile Phase: 20 mM Sodium phosphate pH 2.5
Flow Rate: 1 mL/min
Temperature: 30 °C
Detection: UV @ 270 nm
Sample: 1. Norepinephrine
 2. Epinephrine
 3. Dopamine



App ID 22778



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Kinetex Ordering Information

5 µm Minibore Columns (mm)				SecurityGuard™ ULTRA Cartridges [†]
Phase	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 for 2.1 mm ID

5 µm MidBore™ Columns (mm)				SecurityGuard™ ULTRA Cartridges [†]
Phase	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 for 3.0 mm ID

5 µm Analytical Columns (mm)					SecurityGuard™ ULTRA Cartridges [†]
Phase	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 for 4.6 mm ID

5 µm Axia™ Packed Preparative Columns (mm)					SecurityGuard™ PREP Cartridges [*]
Phase	50 x 21.2	100 x 21.2	150 x 21.2	250 x 21.2	15 x 21.2
EVO C18	00B-4633-P0-AX	00D-4633-P0-AX	00F-4633-P0-AX	00G-4633-P0-AX	AJ0-9304 for 21.2 mm ID

[†] SecurityGuard ULTRA Cartridges require holder, Part No.: AJ0-9000
^{*} PREP SecurityGuard Cartridges require holder, Part No.: AJ0-8223

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Find more information on Kinetex core-shell HPLC and UHPLC columns at:

www.phenomenex.com/kinetex



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Comparative separations may not be representative of all applications.

SecurityGuard is patented by Phenomenex. U.S. Patent No. 6,162,362.

CAUTION: this patent only applies to the analytical-sized guard cartridge holder, and does not apply to SemiPrep, PREP or ULTRA holders, or to any cartridges.

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

Kinetex EVO is patented by Phenomenex. U.S. Patent Nos. 7,563,367 and 8,658,038 and foreign counterparts.

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