

APPLICATION

Cold Medicine API Screen Using a Kinetex® EVO C18 Core-Shell LC Column

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Overview

The current range of compounds aimed at the treatment of the common cold is quite large and comprises ingredients of a variety of chemical characteristics. This is the direct result of a diverse array of pharmaceutical formulations that contain more than one active ingredient and target multiple symptoms at once. With such a mixture of polar compounds, resolution, sensitivity, and speed are all important parameters. Using a high performance core-shell Kinetex 2.6 µm EVO C18 column we achieve comprehensive resolution, narrow peak shapes, and a rapid analysis time. This ingredient screen can easily be used as a starting point for individual formulations as well as transferred between R&D and QC instrumentation due to the direct scalability of all three Kinetex EVO C18 particle sizes (1.7 µm, 2.6 µm, 5 µm).

Find more information on Kinetex core-shell HPLC and UHPLC columns at:
www.phenomenex.com/kinetex

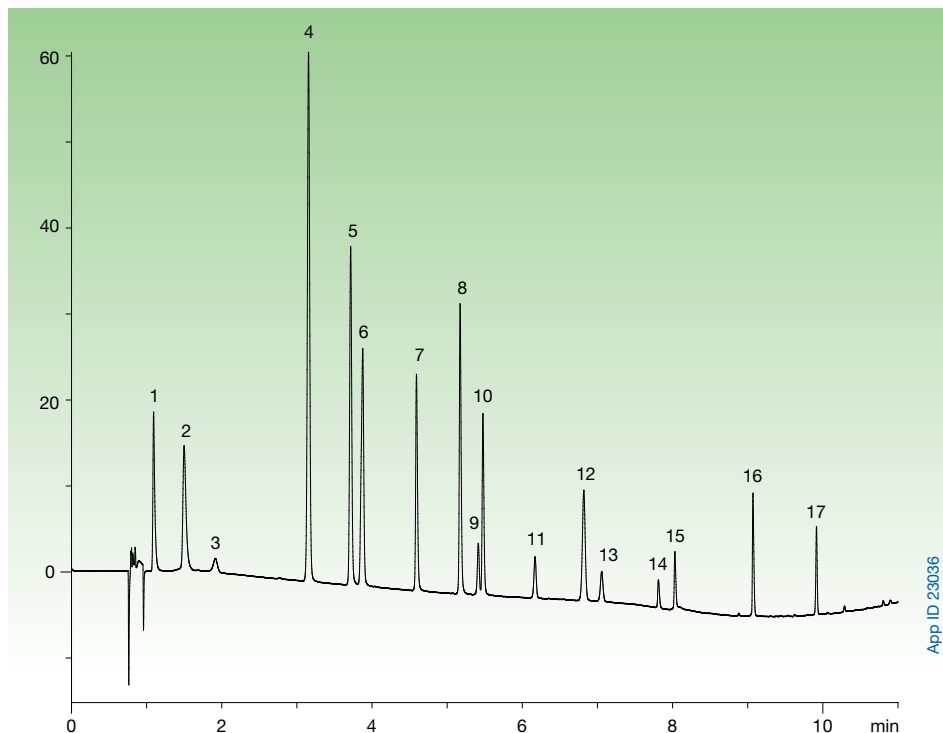
LC/UV Conditions

Column: Kinetex 2.6 µm EVO C18
Dimensions: 100 x 4.6 mm
Part No.: 00D-4725-E0
Mobile Phase: A: 0.1 % TFA
 B: 0.1 % TFA in Acetonitrile
Gradient:

Time (min)	% B
0	2
6	30
11	100

Flow Rate: 1.25 mL/min
Temperature: Ambient
Detection: UV @ 254 nm
Sample:

1. Maleic acid
2. Fumaric acid
3. Phenylephrine
4. Acetaminophen
5. Pheniramine
6. Doxylamine
7. Pyrilamine
8. Chlorpheniramine
9. Guaifenesin
10. Brompheniramine
11. Acetylsalicylic acid
12. 4-Nitrophenol
13. Impurity
14. Dextromethorphan
15. Diphenhydramine
16. Clemastine
17. Ibuprofen



APPLICATION

Ordering Information

Kinetex[®] EVO C18 Core-Shell LC Columns

5 µm Minibore Columns (mm)				SecurityGuard [™] ULTRA Cartridges [†]
30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
00A-4633-AN	00B-4633-AN	00D-4633-AN	00F-4633-AN	AJO-9298
for 2.1 mm ID				

5 µm MidBore [™] Columns (mm)			SecurityGuard [™] ULTRA Cartridges [†]
50 x 3.0	100 x 3.0	150 x 3.0	3/pk
00B-4633-YO	00D-4633-YO	00F-4633-YO	AJO-9297
for 3.0 mm ID			

5 µm Analytical Columns (mm)				SecurityGuard [™] ULTRA Cartridges [†]
50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/pk
00B-4633-EO	00D-4633-EO	00F-4633-EO	00G-4633-EO	AJO-9296
for 4.6 mm ID				

2.6 µm Minibore Columns (mm)				SecurityGuard [™] ULTRA Cartridges [†]
30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
00A-4725-AN	00B-4725-AN	00D-4725-AN	00F-4725-AN	AJO-9298
for 2.1 mm ID				

2.6 µm MidBore [™] Columns (mm)			SecurityGuard [™] ULTRA Cartridges [†]
50 x 3.0	100 x 3.0	150 x 3.0	3/pk
00B-4725-YO	00D-4725-YO	00F-4725-YO	AJO-9297
for 3.0 mm ID			

2.6 µm Analytical Columns (mm)				SecurityGuard [™] ULTRA Cartridges [†]
50 x 4.6	100 x 4.6	150 x 4.6	3/pk	
00B-4725-EO	00D-4725-EO	00F-4725-EO	AJO-9296	
for 4.6 mm ID				

1.7 µm Minibore Columns (mm)			SecurityGuard [™] ULTRA Cartridges [†]	
50 x 2.1	100 x 2.1	150 x 2.1	3/pk	
00B-4726-AN	00D-4726-AN	00F-4726-AN	AJO-9298	
for 2.1 mm ID				

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

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

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