

APPLICATION

Rapid and Selective Analysis of Curcuminoids using Kinetex[®] 2.6 μ m F5 Core-Shell Column by HPLC/UV

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Overview

Millions of consumers take vitamin, herbal and dietary supplements on a daily basis for various reasons. Curcuminoids are a group of phenolic compounds (curcumin, demethoxycurcumin and bisdemethoxycurcumin) and are consumed for their anti-oxidant and anti-inflammatory effects on the human body. They represent the yellow pigments in turmeric. As the use and additions of curcuminoids in supplements increases, so is the need to accurately quantify and qualify them from other components with varying polarities or aromatic qualities. Provided is a rapid and selective analysis of curcuminoids using Kinetex F5 Core-Shell Technology.

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

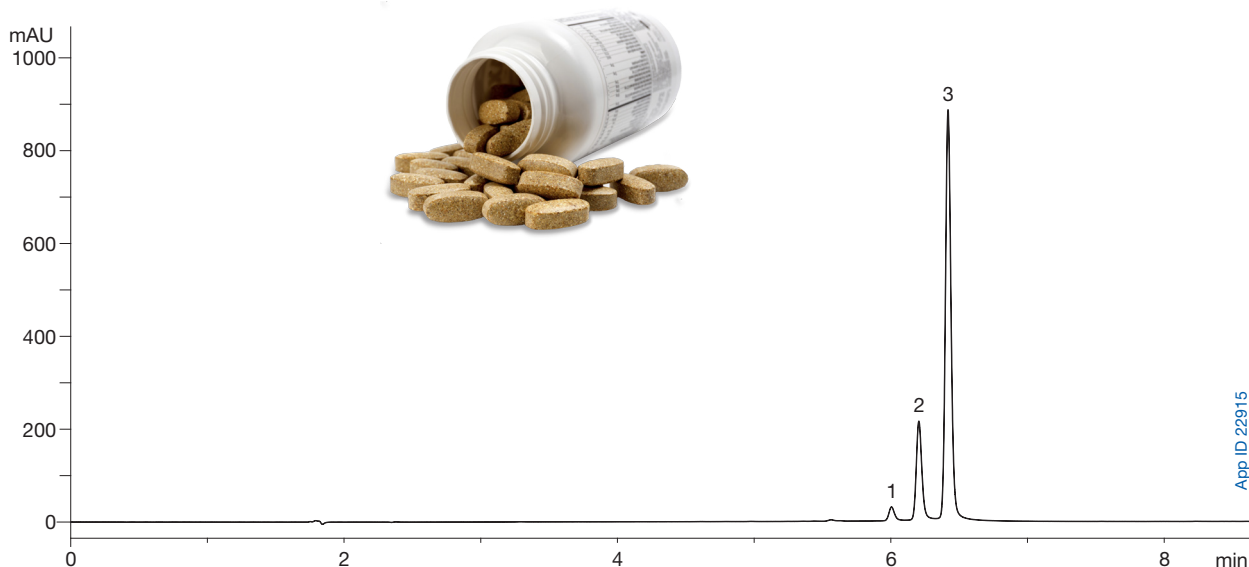
www.phenomenex.com/kinetex

LC/UV Conditions

Column: Kinetex 2.6 μ m F5 100 Å
Dimensions: 150 x 4.6 mm
Part No.: 00F-4723-E0
Mobile Phase: A: 0.1 % Formic Acid in Water
 B: Acetonitrile

Gradient:	Time (min)	% B
	0	55
	8	70
	9	100
	10	100
	11	55
	13	55

Flow Rate: 1.0 mL/min
Temperature: Ambient
Detection: UV @ 425 nm
Sample: 1. Bis-demethoxy-curcumin
 2. Demethoxy-curcumin
 3. Curcumin



Note: Sample represented is an extracted pill formulation.



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Kinetex® Ordering Information

2.6 µm Minibore Columns (mm)

Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
F5	00A-4723-AN	00B-4723-AN	00D-4723-AN	00F-4723-AN	AJO-9322

**SecurityGuard™
ULTRA
Cartridges†**
for 2.1 mm ID

2.6 µm MidBore™ Columns (mm)

Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
F5	00B-4723-YO	00D-4723-YO	00F-4723-YO	AJO-9321

**SecurityGuard
ULTRA
Cartridges†**
for 3.0 mm ID

2.6 µm Analytical Columns (mm)

Phases	50 x 4.6	100 x 4.6	150 x 4.6	3/pk
F5	00B-4723-E0	00D-4723-E0	00F-4723-E0	AJO-9320

**SecurityGuard
ULTRA
Cartridges†**
for 4.6 mm ID

1.7 µm Minibore Columns (mm)

Phases	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
F5	00B-4722-AN	00D-4722-AN	00F-4722-AN	AJO-9322

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

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If Phenomenex products in this technical note do not provide at least an equivalent separation as compared to other products of the same phase and dimensions, return the product with comparative data within 45 days for a FULL REFUND.

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Trademarks

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