

APPLICATION

Separation of Various Taxanes on a Kinetex[®] 5 μm F5 Column

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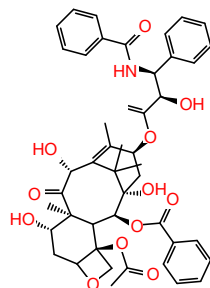
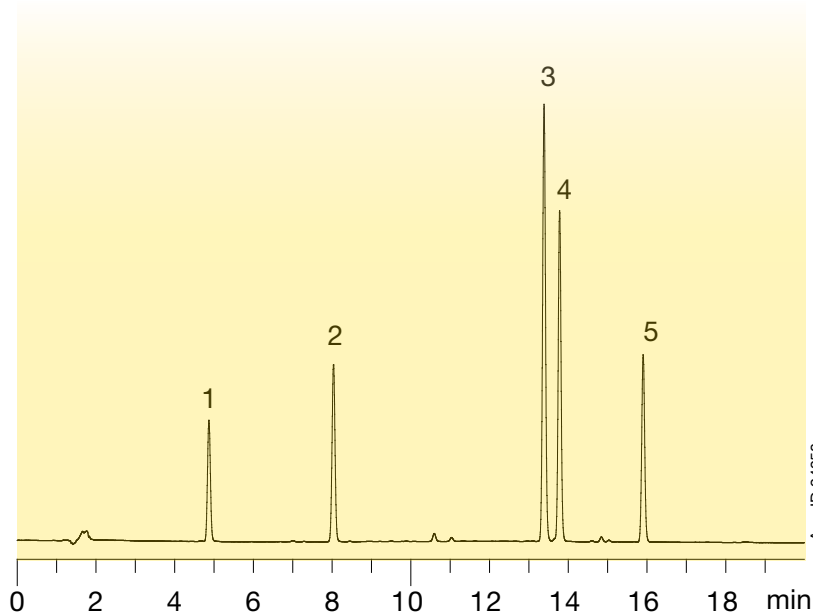


Overview

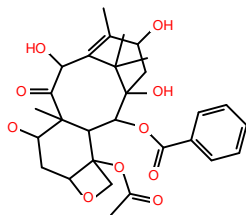
Taxanes are a class of terpenes that are naturally present in numerous trees belonging to the Genus *Taxus*, more commonly known as Yew trees. These compounds are relevant in the pharmaceutical and medical industries due to their anti-cancer properties. A number of Taxanes are already sold on the market as chemotherapeutic agents and others are still a topic of interest for research. Considering these compounds are extracted from plant matter, numerous Taxanes as well as other biological materials can be extracted in tandem. Given the importance of these compounds already established in the pharmaceutical industry, it is crucial to have an analytical method capable of differentiating Taxanes from one another in a reasonable manner. Here we present a fast, efficient, and robust method for the separation of Taxanes on a Kinetex F5 stationary phase. The highly polar nature of this stationary phase is perfect for a selective separation for these highly polar analytes.

LC-UV Conditions

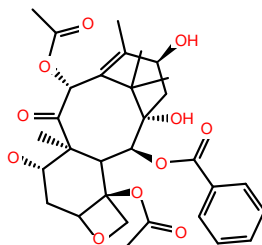
Column:	Kinetex 5 μm F5	
Dimensions:	100 x 4.6 mm	
Part No.:	00D-4724-E0	
Mobile Phase:	A: Water with 0.1 % Formic Acid B: Acetonitrile with 0.1 % Formic Acid	
Gradient:	Time (min)	B (%)
	0	25
	20	75
Injection:	20 μL	
Flow Rate:	1 mL/min	
Temperature:	22 °C	
Detection:	UV @ 230 nm	
Analytes	1. 7-Epi 10-Desacetyl Paclitaxel 2. 10-deacetylbaaccatin III 3. Baccatin III 4. 7-epi-taxol 5. Taxol (Paclitaxel)	



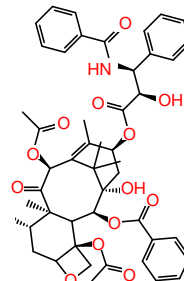
10-Deacetyl-7-epitaxol



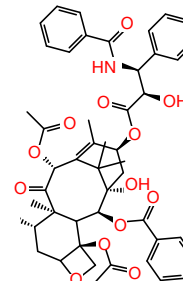
10-deacetylbaaccatin III



Baccatin III



7-epi-taxol



Taxol (Paclitaxel)



APPLICATION

Kinetex[®] Ordering Information

5 μ m 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
F5	00A-4724-AN	00B-4724-AN	00D-4724-AN	00F-4724-AN	AJO-9322
for 2.1 mm ID					

5 μ m MidBore [™] Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
F5	00B-4724-YO	00D-4724-YO	00F-4724-YO	AJO-9321
for 3.0 mm ID				

5 μ m 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
F5	00B-4724-E0	00D-4724-E0	00F-4724-E0	00G-4724-E0	AJO-9320
for 4.6 mm ID					

2.6 μ m 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
F5	00A-4723-AN	00B-4723-AN	00D-4723-AN	00F-4723-AN	AJO-9322
for 2.1 mm ID					

2.6 μ m MidBore [™] Columns (mm)				SecurityGuard ULTRA Cartridges [†]
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
for 3.0 mm ID				

2.6 μ m Analytical Columns (mm)				SecurityGuard ULTRA Cartridges [†]
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
for 4.6 mm ID				

1.7 μ m Minibore Columns (mm)				SecurityGuard ULTRA Cartridges [†]
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
for 2.1 mm ID				

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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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