

# APPLICATION

## LC-MS/MS Analysis of a Steroid Panel using Kinetex® EVO C18 Core-Shell HPLC/UHPLC Columns

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### Overview

This application note describes the separation and LC-MS/MS analysis of a 12 steroid panel. The steroid panel was analyzed in a single LC-MS/MS application however they can also be analyzed in three separate panels as shown in the representative chromatograms.

### LC-MS/MS Conditions

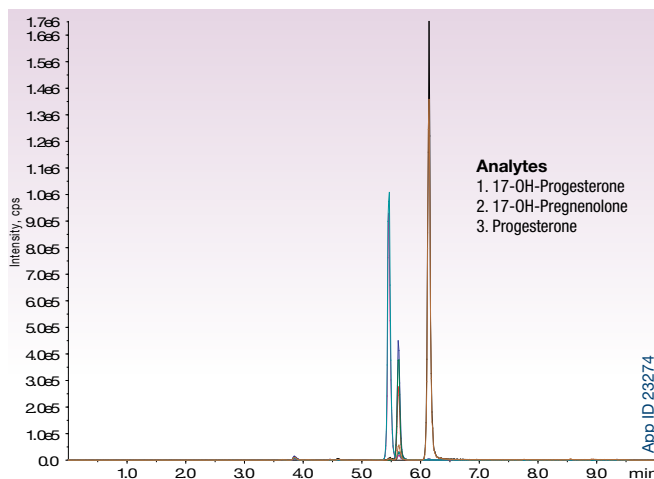
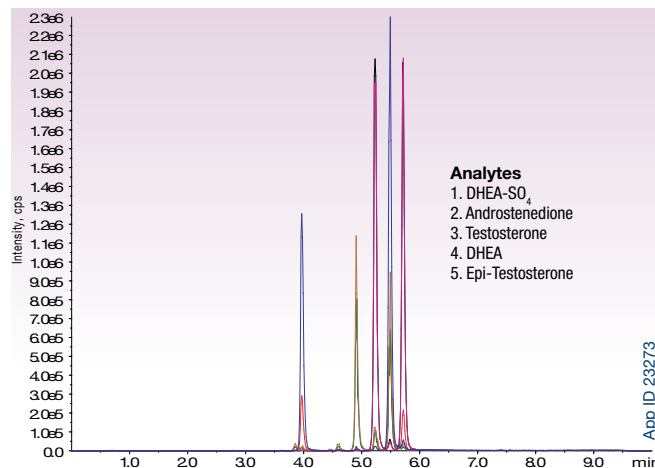
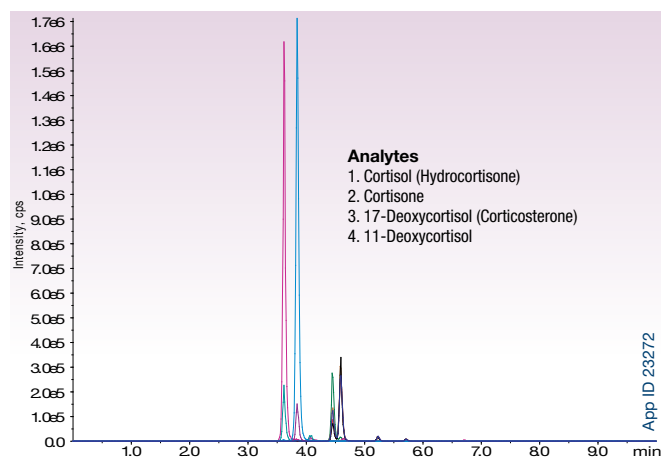
**Column:** Kinetex 5 µm EVO C18  
**Dimensions:** 100 x 2.1 mm  
**Part No.:** [00D-4633-AN](#)  
**Mobile Phase:** A: 5 mM Ammonium Formate in Water  
 B: 100 % Methanol  
**Gradient:**

Time (min)	% B
0	30
8	95
8.5	95
8.51	30
10	30

**Flow Rate:** 0.6 mL/min  
**Temperature:** 22 °C  
**Detection:** MRM, API 5000™ (SCIEX®), APCI+

### Representative Chromatograms of Steroids

Three separate chromatograms are depicted to better show the separation between the 12 steroids however they were run together in a single LC-MS/MS run



# APPLICATION

## Ordering Information

### Kinetex<sup>®</sup> Core-Shell HPLC/UHPLC Columns

5 µm Minibore Columns (mm)					SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
EVO C18	<a href="#">00A-4633-AN</a>	<a href="#">00B-4633-AN</a>	<a href="#">00D-4633-AN</a>	<a href="#">00F-4633-AN</a>	<a href="#">AJ0-9298</a>

for 2.1 mm ID

5 µm MidBore <sup>™</sup> Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
EVO C18	<a href="#">00B-4633-YO</a>	<a href="#">00D-4633-YO</a>	<a href="#">00F-4633-YO</a>	<a href="#">AJ0-9297</a>

for 3.0 mm ID

5 µm Analytical Columns (mm)					SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/pk
EVO C18	<a href="#">00B-4633-E0</a>	<a href="#">00D-4633-E0</a>	<a href="#">00F-4633-E0</a>	<a href="#">00G-4633-E0</a>	<a href="#">AJ0-9296</a>

for 4.6 mm ID

2.6 µm Minibore Columns (mm)					SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
EVO C18	<a href="#">00A-4725-AN</a>	<a href="#">00B-4725-AN</a>	<a href="#">00D-4725-AN</a>	<a href="#">00F-4725-AN</a>	<a href="#">AJ0-9298</a>

for 2.1 mm ID

2.6 µm MidBore Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
EVO C18	<a href="#">00B-4725-YO</a>	<a href="#">00D-4725-YO</a>	<a href="#">00F-4725-YO</a>	<a href="#">AJ0-9297</a>

for 3.0 mm ID

2.6 µm Analytical Columns (mm)					SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	50 x 4.6	100 x 4.6	150 x 4.6	3/pk	
EVO C18	<a href="#">00B-4725-E0</a>	<a href="#">00D-4725-E0</a>	<a href="#">00F-4725-E0</a>	<a href="#">AJ0-9296</a>	

for 4.6 mm ID

1.7 µm Minibore Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phases	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
EVO C18	<a href="#">00B-4726-AN</a>	<a href="#">00D-4726-AN</a>	<a href="#">00F-4726-AN</a>	<a href="#">AJ0-9298</a>

for 2.1 mm ID

<sup>‡</sup> SecurityGuard ULTRA Cartridges require holder, Part No.: [AJ0-9000](#)

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