

# APPLICATION

## Analysis of Common Statin Drugs Using a Kinetex® F5 Core-Shell LC Column

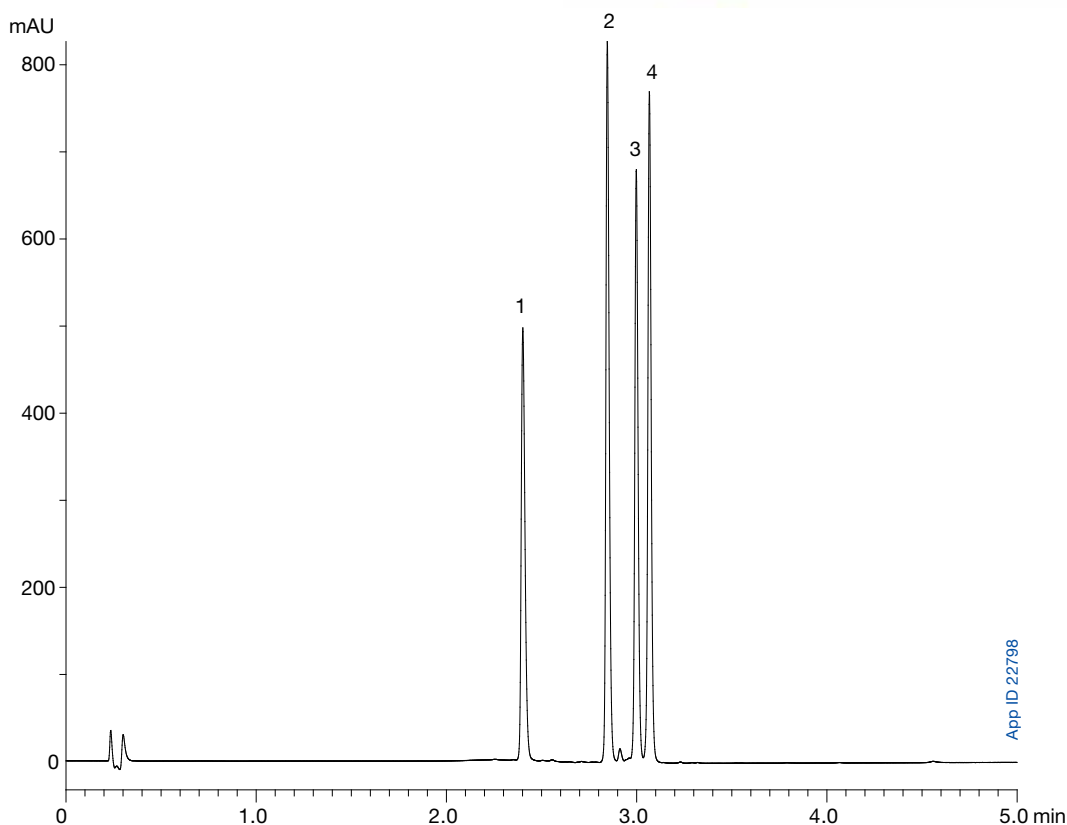
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### Overview

Statin drugs are a popular class of drugs which lower cholesterol levels by way of inhibiting HMG-CoA reductase, an enzyme that's crucial to the production of cholesterol in the human body. These drugs are very widely prescribed because of their progressive ability to prevent cardiovascular disease (CVD) associated with high cholesterol levels. Because of their popularity, a rapid and robust analytical testing method is critically important. As shown, the pentafluorophenyl functional group of the Kinetex 2.6 µm F5 core-shell column displays excellent selectivity for these pharmaceuticals through both polar and non-polar interactions, resulting in a fast analysis time.

### LC/UV Conditions

**Column:** Kinetex 2.6 µm F5  
**Dimensions:** 50 x 2.1 mm  
**Part No.:** 00B-4723-AN  
**Mobile Phase:** A: 0.1 % TFA in Water  
 B: Acetonitrile  
**Gradient:** 20 to 90 % B in 1 min. Hold for 4 min  
**Flow Rate:** 0.5 mL/min  
**Temperature:** Ambient  
**Detection:** UV @ 248 nm  
**Sample:** 1. Lovastatin  
 2. Atorvastatin  
 3. Pravastatin  
 4. Simvastatin



App ID 22798

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## Kinetex® Ordering Information

1.7 µm Minibore Columns				SecurityGuard™ ULTRA Cartridges‡
Phase	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
F5	00B-4722-AN	00D-4722-AN	00F-4722-AN	AJ0-9322 for 2.1 mm ID

2.6 µm Minibore Columns			SecurityGuard ULTRA Cartridges‡
Phase	50 x 2.1	100 x 2.1	3/pk
F5	00B-4723-AN	00D-4723-AN	AJ0-9322 for 2.1 mm ID

2.6 µm MidBore™ Columns			SecurityGuard ULTRA Cartridges‡
Phase	50 x 3.0	100 x 3.0	3/pk
F5	00B-4723-Y0	00D-4723-Y0	AJ0-9321 for 3.0 mm ID

2.6 µm Analytical Columns				SecurityGuard ULTRA Cartridges‡
Phase	50 x 4.6	100 x 4.6	150 x 4.6	3/pk
F5	00B-4723-E0	00D-4723-E0	00F-4723-E0	AJ0-9320 for 4.6 mm ID

‡SecurityGuard ULTRA Cartridges require holder, Part No.: AJ0-9000