

APPLICATION



Separation of Ephedrine and Pseudoephedrine Enantiomers Using a Lux® 3 µm AMP Chiral Column

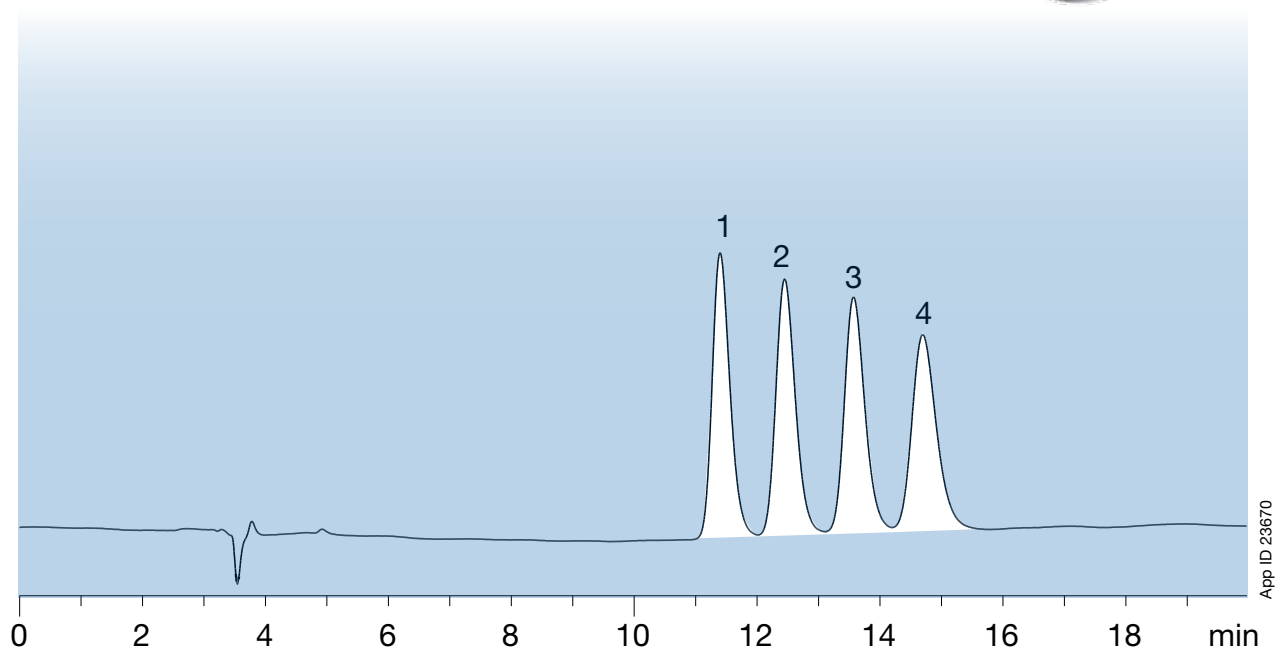
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Overview

Pseudoephedrine is a diastereomer of ephedrine and is readily reduced into methamphetamine, a schedule II controlled substance, or oxidized into methcathinone, a schedule I controlled substance. A fast and effective method was developed to separate all four compounds using a Lux 3 µm AMP column. This novel and high-performance chiral stationary phase gives excellent selectivity for these four compounds resulting in baseline resolution between all four peaks.

LC/UV Conditions

Column: Lux 3 µm AMP
Dimensions: 150 x 4.6 mm
Part No.: 00F-4751-E0
Mobile Phase: 5 mM Ammonium Bicarbonate adjusted to pH 11 with Ammonium Hydroxide/Methanol/Acetonitrile/Isopropanol (65:20:10:5)
Flow Rate: 0.5 mL/min
Temperature: Ambient
Detection: UV @ 210 nm
Sample: 1. 1S,2R (+) - Ephedrine HCl
2. 1R,2S (-) - Ephedrine HCl
3. R,R (-) - Pseudoephedrine
4. S,S (+) - Pseudoephedrine



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Lux AMP Ordering Information

Lux [®] 3 µm Analytical Columns		SecurityGuard [™] Cartridges [†]		
Phase	150 x 3.0	150 x 4.6	10/pk	10/pk
AMP	00F-4751-Y0	00F-4751-E0	AJO-8475	AJO-8476

[†]SecurityGuard Cartridges require holder, Part No.: KJ0-4284

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