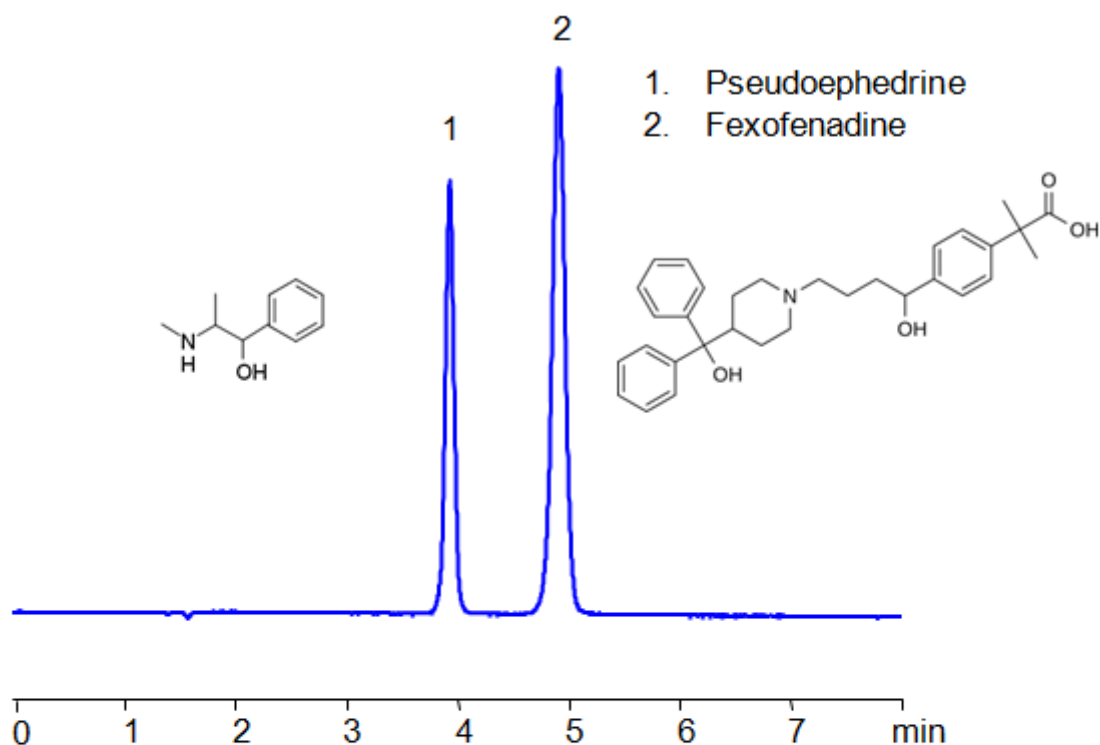


HPLC Method for Analysis of Pseudoephedrine and Fexofenadine from Allegra D Tablet on Primesep 100 Column

<https://sielc.com/hplc-method-for-analysis-of-pseudoephedrine-and-fexofenadine>

Chromatogram



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN/H ₂ O – 65/35%
Buffer:	H ₂ SO ₄ - 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 200 nm

Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Pseudoephedrine (PSE) , Fexofenadine hydrochloride

Pseudoephedrine is one of the most popular decongestant drugs on the market, in part due to its efficacy and in part due to its status as an amphetamine. It has the chemical formula C₁₀H₁₅N₁O. It has been reported to have been misused as a psychostimulant, since it is accessible over-the-counter. It was a banned substance by the International Olympic Committee (IOC) until 2004, but was banned again in 2010.

Fexofenadine is a common antihistamine with the chemical formula $C_{22}H_{29}NO_4$. It is used to treat hives, itching, and hay fever. Pseudoephedrine and Fexofenadine can be separated, retained, and analyzed on a Primesep 100 mixed-mode column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a sulfuric acid (H_2SO_4) buffer. This analysis method can be UV detected at 200 nm with high resolution and peak symmetry.

Method Parameters

Mobile Phase	MeCN – 65%
Buffer	H_2SO_4 – 0.2%
Flow Rate	1.0 ml/min
Detection	UV 200 nm
Class of Compounds	Drug
Analyzing Compounds	Pseudoephedrine (PSE), Fexofenadine hydrochloride

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 μ m, 100 A, dual ended

[Order this column at hplc-shop.de](http://hplc-shop.de) →