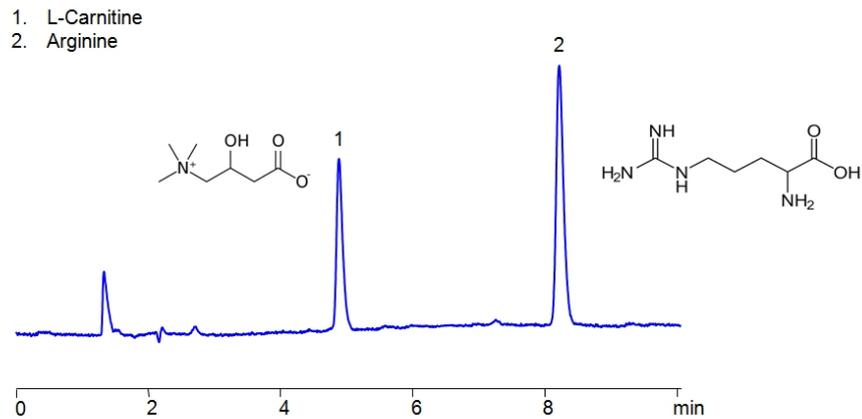


HPLC Method For Analysis Of L-Carnitine and Arginine on Primesep 100 Column



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN/H ₂ O – 20/80%
Buffer:	Gradient H ₂ SO ₄ from 0.1 to 0.5%, 10 min
Flow rate:	1.0 mL/min
Detection:	UV 205 nm

Separation type: Liquid Chromatography Mixed-mode

High Performance Liquid Chromatography (HPLC) Method for Analysis of L-Carnitine and Arginine

L-carnitine is a quaternary ammonium cation (also known as a quat) that is key to the metabolic processes of most living species. Arginine is an alpha amino acid that is key to the biosynthesis of proteins. These two amine-based compounds can be detected in the low UV regime. Using a Primesep 100 mixed-mode column and a gradient mobile phase consisting of water and acetonitrile (MeCN) with a gradient of sulfuric acid (H₂SO₄) as a buffer, L-carnitine and Arginine can be retained, separated, and analyzed. This analysis method can be UV detected at 205 nm.

Method Parameters

Column	Primesep 100, 4.6x150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H ₂ O – 20/80%
Buffer	Gradient H ₂ SO ₄ from 0.1 to 0.5%, 10 min
Flow Rate	1.0 mL/min
Detection	UV, 205 nm

Quelle: <https://sielc.com/hplc-method-for-analysis-of-l-carnitine-and-arginine>