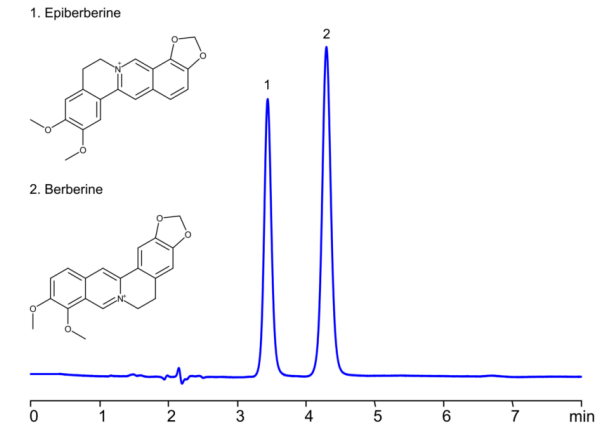
Alltesta HPLC Method for Analysis of Epiberberine and Berberine on Primesep B Column



Column:	Primesep B
Column size:	3.2 × 150 mm, 5 µm
Column part number:	B-32.150.0510
Mobile phase:	MeCN/H2O - 20/80%
Buffer:	H2SO4 - 0.1%
Flow rate	0.5 mL/min
Detection:	UV 275 nm

Epiberberine and Berberine are both natural alkaloids found in various medicinal plants, particularly in the Berberis species. They share a similar chemical structure and biological properties but have distinct effects.

Berberine is well-known for its antimicrobial, anti-inflammatory, and metabolic benefits, including blood sugar regulation and cholesterol reduction. It is commonly used for diabetes, gut health, and cardiovascular support.

Epiberberine is a structural isomer of berberine and is believed to enhance its bioavailability and metabolic effects. Research suggests it may contribute to glucose metabolism and lipid regulation, making it a potential complementary compound in berberine-based supplements.

Epiberberine and berberine can be retained and analyzed using a Primesep B mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase composed of water, acetonitrile (MeCN), and sulfuric acid as a buffer. Detection is performed using UV at 275 nm.

You can view examples of chromatograms obtained using the Allesta instrument and Sielc columns by clicking here .

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de

Method Parameters

Column	Primesep B, 3.2 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 20/80%
Buffer	H2SO4 -0.1%
Flow Rate	0.5 mL/min
Detection	UV 275 nm

Quelle: https://sielc.com/alltesta-hplc-method-for-analysis-epiberberine-berberine