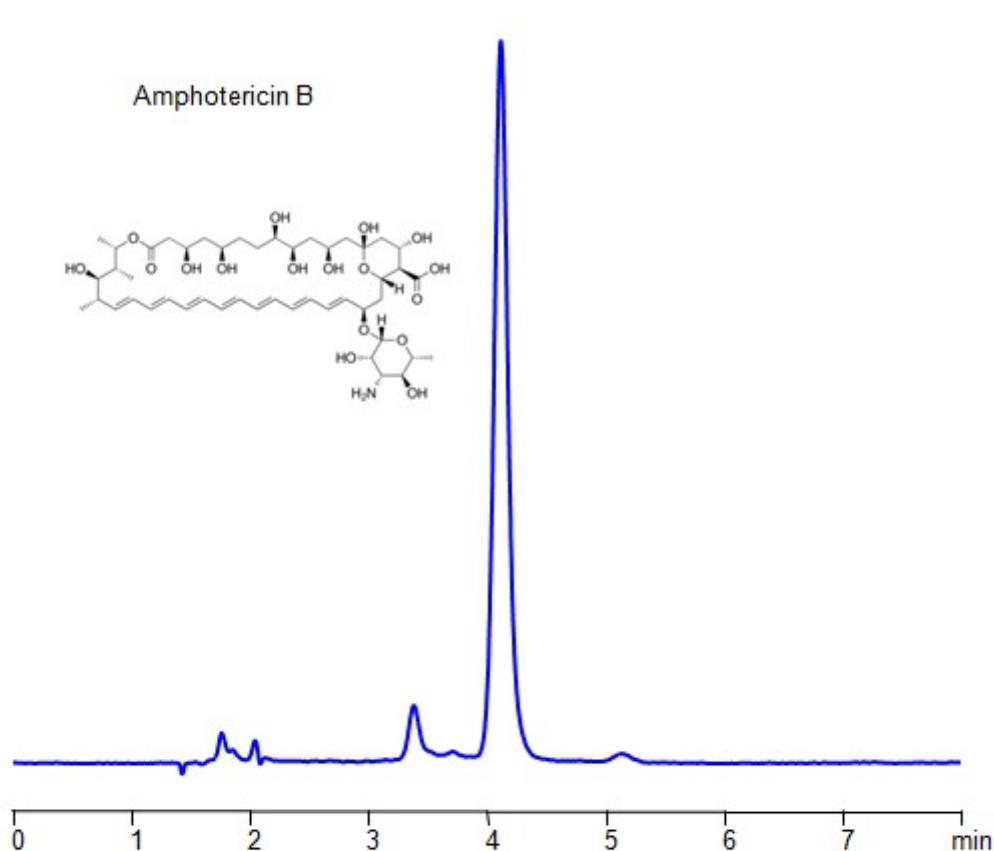


HPLC Method for Analysis of Amphotericin B on Primesep 100 Column

<https://sielc.com/hplc-method-for-analysis-amphotericin-b>

Chromatogram



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN - 70%
Buffer:	H ₂ SO ₄ - 0.1%
Flow rate:	1.0 ml/min
Detection:	Vis 408 nm
Injection Volume:	5 µL
Sample:	0.007 mg/ml
Diluent:	MeCN – 50%
LOD:	5 ppb

Description

· HPLC Method for Analysis of Amphotericin B on Primesep 100 Column by SIELC Technologies

Amphotericin B is an antifungal medication with the chemical formula $C_{47}H_{73}NO_{17}$. It is used to treat serious fungal infections and belongs to the polyene class of antifungal drugs and is known for its broad-spectrum activity against a variety of fungi. Amphotericin B works by binding to ergosterol, a component of fungal cell membranes. This binding disrupts the integrity of the fungal cell membrane, leading to leakage of cellular contents and ultimately causing cell death. It is effective against a broad spectrum of fungi, including *Candida* species, *Aspergillus* species, *Cryptococcus neoformans*, and various molds and

dimorphic fungi.

It's important for healthcare professionals to carefully weigh the potential benefits and risks of using Amphotericin B, considering the severity of the fungal infection and the patient's overall health. As with any medication, it should be administered under the supervision of a qualified medical professional.

You can find detailed UV spectra of Amphotericin B and information about its various lambda maxima by visiting the following link.

Amphotericin B can be retained and analyzed using a Primesep 100 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using Vis at 408 nm

Method Parameters

Mobile Phase	MeCN – 70%
Buffer	H2SO4 – 0.1%
Flow Rate	1.0 ml/min
Detection	Vis 408 nm
Samples	0.007 mg/ml in MeCN/H2O – 50/50%
Injection volume	5 µl
LOD*	5 ppb
Class of Compounds	Drug
Analyzing Compounds	Amphotericin B

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 µm, 100 A, dual ended

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