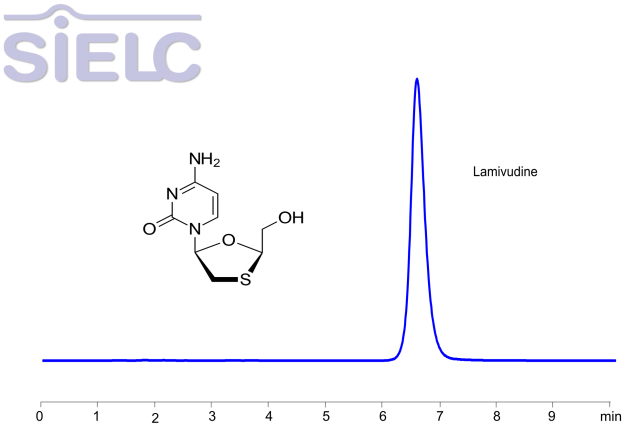
HPLC-MS Method for Analysis of Lamivudine on Primesep 100 Column



Column:	Primesep 100
Column size:	2.1 × 100 mm, 5 µm
Column part number:	100-21.100.0510
Mobile phase:	MeCN/H_2O - 40/60%
Buffer:	Ammonium Formate pH 3.0 - 20 mM
Flow rate	0.2 ml/min
Detection:	UV at 277 nm; ESI-SIM: $[M+H]^+$ 230, 271
Concentration:	0.2 mg/ml
Injection Volume:	5 µL
Diluent:	MeCN/H2O - 50/50%
Limit of Detection UV:	50 ppb

Lamivudine is an antiviral medication used primarily to treat infections caused by the human immunodeficiency virus (HIV) and hepatitis B virus (HBV). It belongs to a class of drugs known as nucleoside reverse transcriptase inhibitors (NRTIs).

Lamivudine can be retained, and analyzed using a Primesep 100 mix mode stationary phase column. The analysis utilizes a isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and Ammonium Formate pH 3.0 – 20 mM as a buffer. Detection is carried out using UV, LC-MS.

Method Parameters

Column	Primesep 100, 2.1 x 100 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 60/40%
Buffer	Ammonium Formate pH 3.0 – 20 mM
Flow Rate	0.2 mL/min
Detection	UV at 277 nm; ESI-SIM: [M+H]+ 230, 271

Quelle: https://sielc.com/hplc-determination-of-lamivudine

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