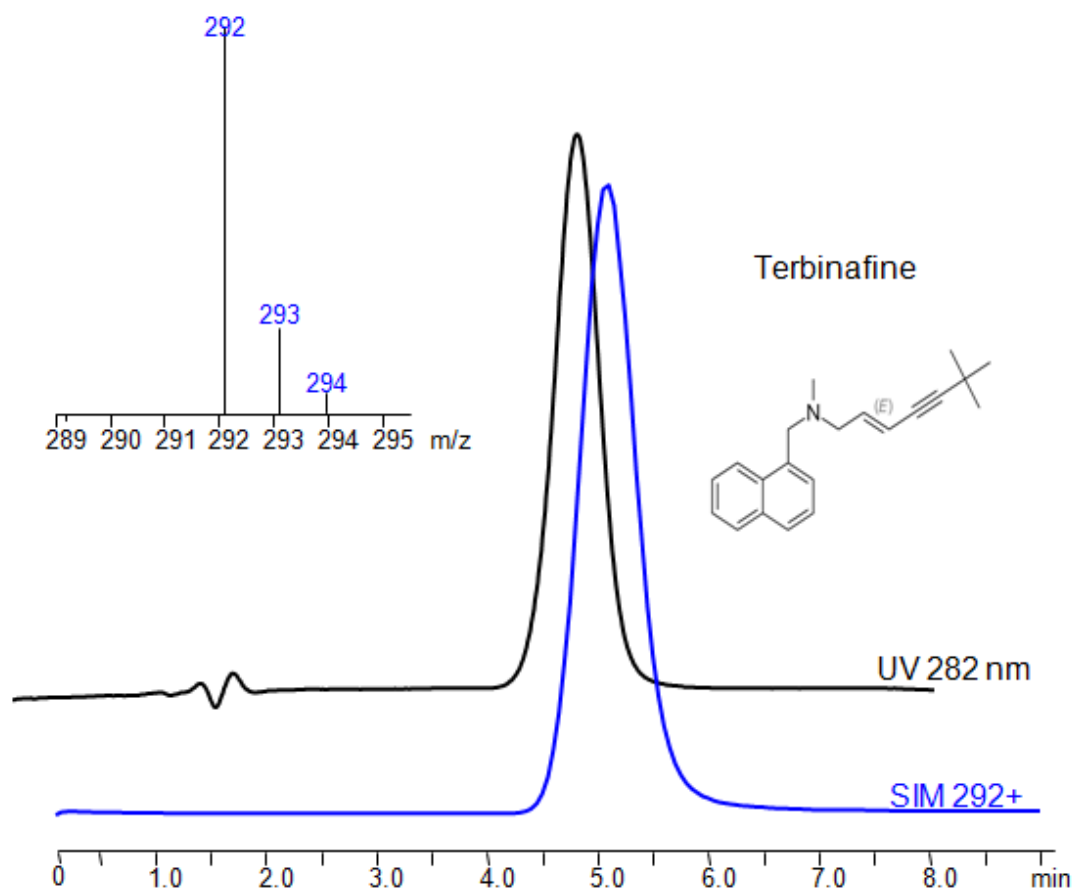


HPLC – MS Method for Analysis of Terbinafine on Primesep B Column

<https://sielc.com/hplc-method-for-analysis-of-terbinafine-ms>

Chromatogram



Column:	Primesep B
Column size:	2.1 × 100 mm, 5 µm
Column part number:	B - 21.1050.0510
Mobile phase:	Gradient MeCN – 20 - 50 %, 8 min
Buffer:	Ammonium Formate pH 3.0-20 mM
Flow rate:	0.2 mL/min
Detection:	UV 282 nm, SIM 292 +

HPLC - MS Method for Analysis of Terbinafine on Primesep B Column by SIELC Technologies

Description

Terbinafine is an antifungal medication commonly used to treat fungal infections, particularly those caused by dermatophytes. Here are some key points about terbinafine:

Mechanism of Action: Terbinafine is classified as an allylamine antifungal. It works by inhibiting the enzyme squalene epoxidase, which is important in the fungal ergosterol synthesis pathway. This disruption results in a deficiency of ergosterol in the fungal cell membrane and an accumulation of squalene, which is toxic to the fungus.

Terbinafine can be retained, and analyzed on a Primesep B mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a ammonium format as a buffer. This analysis method can be detected using UV at 283 nm, an Evaporative Light Scattering Detector (ELSD), or any other evaporative detection method (CAD, ESI-MS)

Method Parameters

Mobile Phase	Gradient MeCN – 20-50%, 8 min
Buffer	Ammonium Formate pH 3.0-20 mM
Flow Rate	0.2 ml/min
Detection	UV, 282 nm, SIM 292+
Class of Compounds	Allylamines
Analyzing Compounds	Terbinafine

HPLC Column Used

(Column variation not found)