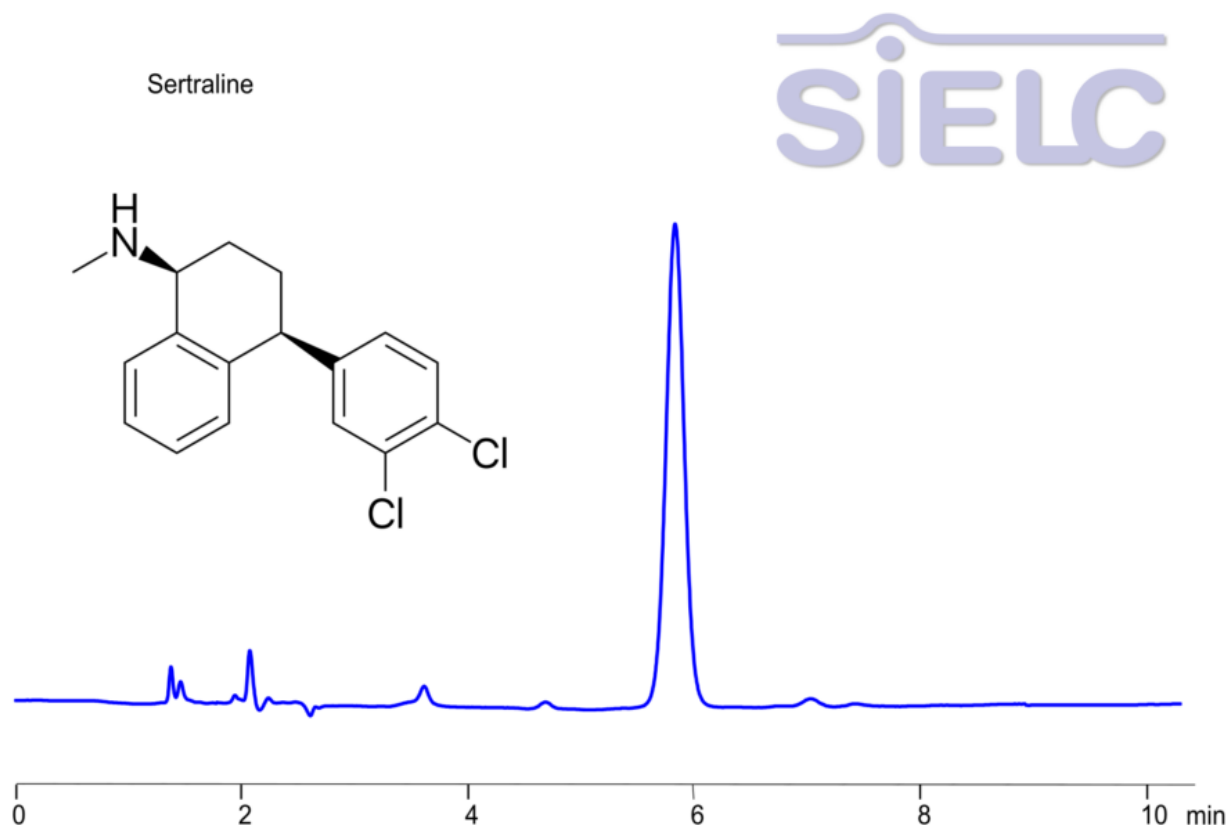


HPLC Method for Analysis of Sertraline in Tablet Dosage on Primesep B Column

<https://sielc.com/hplc-method-sertraline>

Chromatogram



Column:	Primesep B
Column size:	4.6 × 150 mm, 5 µm
Column part number:	B-46.150.0510
Mobile phase:	MeCN/H ₂ O - 30/70%
Buffer:	H ₂ SO ₄ - 0.1%
Flow rate	1.0 ml/min
Detection:	UV 195 nm
Concentration:	0.01 mg/ml
Injection Volume:	1 µL
Diluent:	MeCN/H ₂ O - 50/50%
Limit of Detection:	4 ppb

Description

· Separation type: Liquid Chromatography Mixed-mode SIELC Technologies · HPLC Method for Analysis of Sertraline on Primesep B Column

Sertraline is an antidepressant belonging to the class of selective serotonin reuptake inhibitors (SSRIs). It is commonly prescribed to treat conditions like depression, anxiety disorders, obsessive-compulsive disorder (OCD), panic attacks, and post-traumatic stress disorder (PTSD).

Mechanism of Action Sertraline works by increasing the levels of serotonin, a neurotransmitter that plays a key role in mood regulation, by inhibiting its reuptake in the brain. This leads to improved mood, reduced anxiety, and better overall mental health for individuals with serotonin imbalances.

Common Uses Major depressive disorder (MDD) Generalized anxiety disorder (GAD) Panic disorder Obsessive-compulsive disorder (OCD) Post-traumatic stress disorder (PTSD) Social anxiety disorder

Sertraline can be retained, separated and analyzed using a Primesep B mixed-mode stationary phase column. The analysis employs a gradient method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using UV 195 nm.

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

Method Parameters

Mobile Phase	MeCN/H ₂ O – 30/70%
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	1.0 ml/min
Detection	UV 195 nm
Limit of Detection	4 ppb
Class of Compounds	Drug
Analyzing Compounds	Sertraline

HPLC Column Used

Primesep B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

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