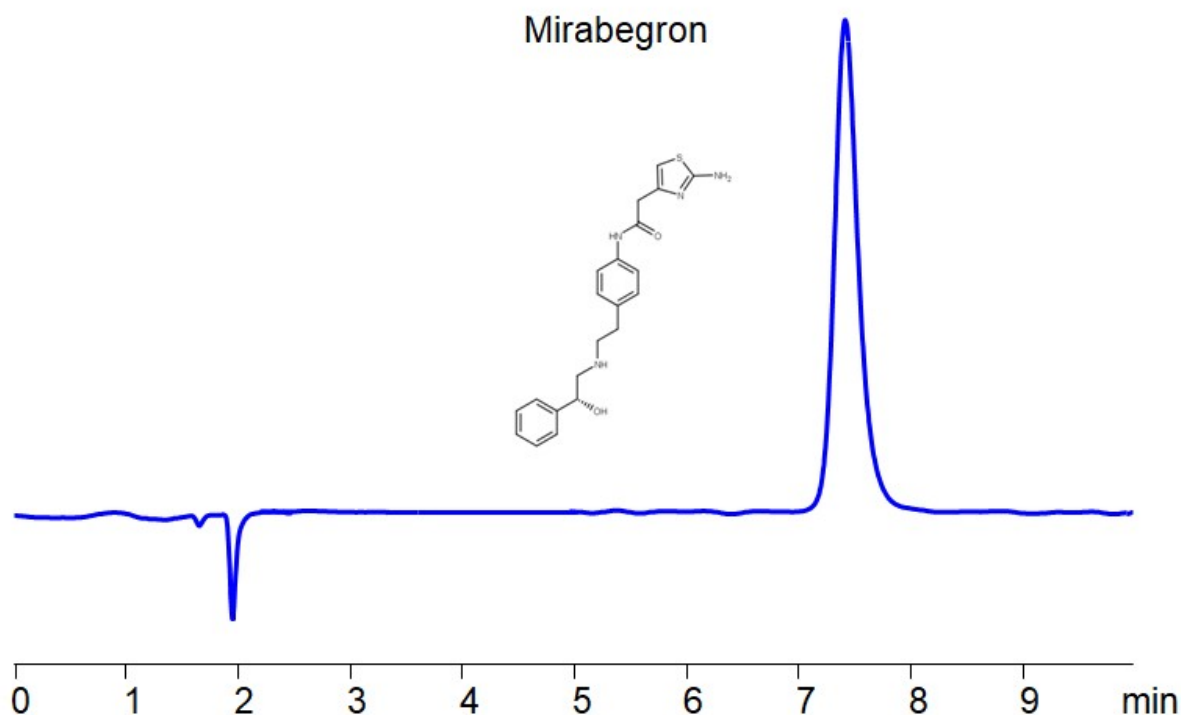


HPLC Method for Analysis of Mirabegron in Tablet Dosage Form on Primesep 500 Column

<https://sielc.com/hplc-determination-of-mirabegron>

Chromatogram



Column:	Primesep 500
Column size:	4.6× 150 mm, 5 µm
Column part number:	500-46.150.0510
Mobile phase:	MeCN/H ₂ O – 60/40%
Buffer:	AmFm pH 3.0 – 20 mM
Flow rate:	1.0 mL/min
Detection:	UV 250 nm

Description

· HPLC Method for Analysis of Mirabegron on Primesep 500 Column by SIELC Technologies

Mirabegron is a medication with the chemical formula C₂₁H₂₄N₄O₂S. It is used in the treatment of overactive bladder (OAB), a condition characterized by symptoms such as frequent urination, urgent need to urinate, and urinary incontinence. It is prescribed for the symptomatic treatment of overactive bladder. Mirabegron helps in managing symptoms like urinary frequency, urgency, and incontinence.

Mirabegron offers an alternative to antimuscarinic drugs, which are another class of medications used for OAB but can have side effects like dry mouth and constipation. Mirabegron generally has a lower risk of these anticholinergic side effects.

Mirabegron represents a significant advancement in the treatment of overactive bladder, offering benefits in terms of efficacy and a favorable side effect profile compared to traditional antimuscarinic agents.

Mirabegron can be retained, and analyzed on a Primesep 500 mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a Ammonium formate as a buffer. This analysis method can be detected using UV at 250 nm.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 60/40%
Buffer	Ammonium formate pH 3.0 – 20 mM
Flow Rate	1.0 ml/min
Detection	UV 250 nm
Peak Retention Time	7.26 min
Class of Compounds	Drug
Analyzing Compounds	Mirabegron

HPLC Column Used

Primesep 500, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

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