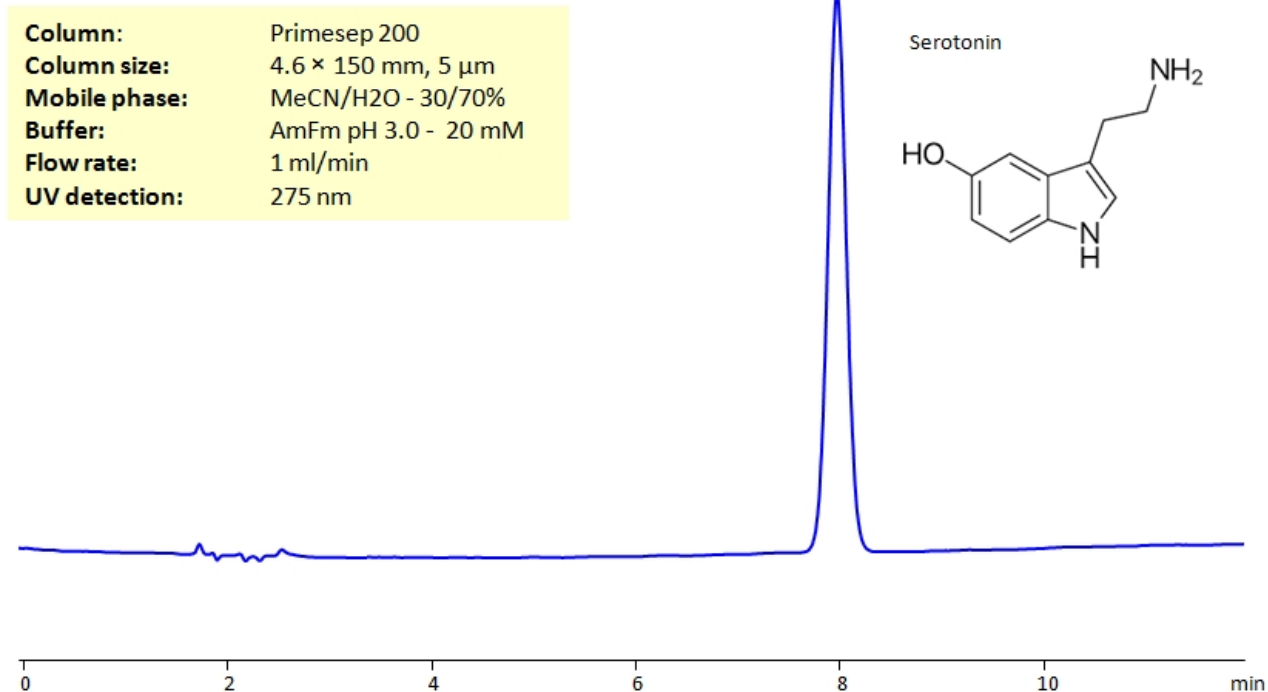


HPLC Determination of Serotonin on Primesep 200 Column

<https://sielc.com/hplc-determination-of-serotonin-on-primesep-200-column>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Serotonin .

Serotonin is a neurotransmitter derived from tryptophan with the chemical formula $C_{10}H_{12}N_2O$. Serotonin is a chemical messenger that is crucial for bodily functions. It helps regulate mood and reduce anxiety, digestion, blood clotting, and contributes to the sleep-wake cycle. Low serotonin levels are often associated with a variety of mental illnesses including but not limited to Obsessive Compulsive Disorder (OCD), Post-Traumatic Stress Disorder (PTSD), Depression, and Anxiety.

Serotonin can be retained and analyzed using the Primesep 200 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with an ammonium formate buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 30/70%
Buffer	AmFm pH 3.0- 20 mM
Flow Rate	1.0 ml/min
Detection	UV 275 nm, MS-compatible mobile phase

Class of Compounds	Drug, Hydrophilic, Supplements, Monoamine, Neurotransmitter
Analyzing Compounds	Serotonin

HPLC Column Used

Primesep 200, 4.6 x 150 mm, 5 µm, 100 A, dual ended

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