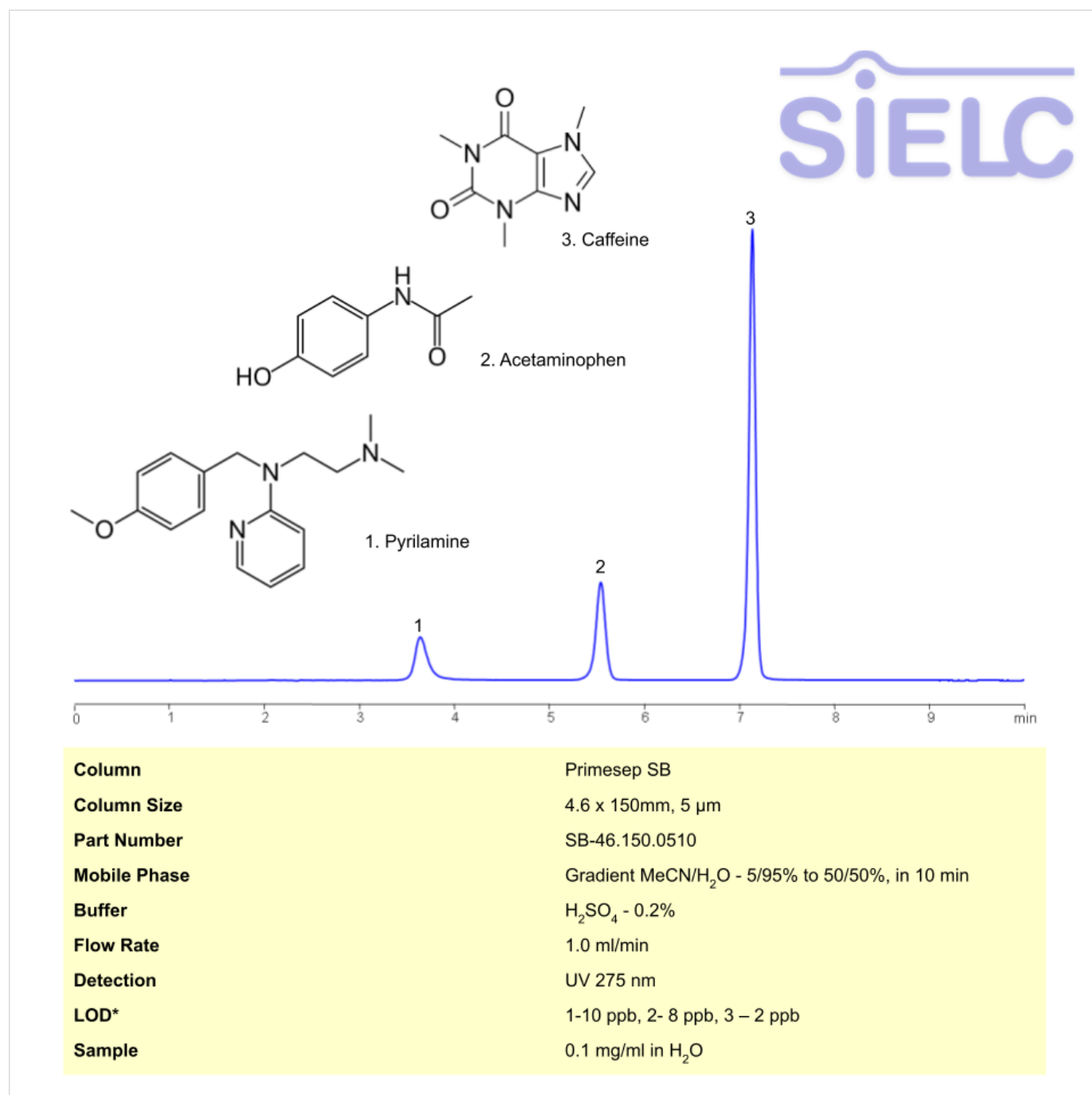


HPLC Method for Analysis of Pyrilamine, Acetaminophen, and Caffeine on Primesep SB Column

<https://sielc.com/hplc-method-for-analysis-of-pyrimidine-acetaminophen-caffeine>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Caffeine , Pyrilamine , Acetaminophen (Paracetamol)

Pyrilamine , also known as mepyramine , is a first-generation antihistamine with the molecular formula C₁₇ H₂₃ N₃ O. It works through targeting the H1 receptor and blocking effects of histamines. It can relieve allergy symptoms like sneezing, runny nose, and itchy, watery eyes. Due to it's ability to cross the blood-brain carrier, it might have a strong drowsiness side-effect after ingestion. When used topically, it is used to treat skin reactions to bug bites, stings, nettles rashes, and more.

Acetaminophen , also known as Paracetamol, is a medication with the molecular formula $C_8H_9NO_2$. It is an over-the-counter pain killer that also reduces fever. Unlike Ibuprofen and naproxen, it is not an anti-inflammatory drug.

Caffeine is a natural stimulant and methylxanthine alkaloid. with the molecular formula $C_8H_{10}N_4O_2$. Caffeine can be found in a variety of plants, including tea, coffee, cocoa, kola nuts, and guarana. Ingestion of it can increase alertness and cognitive function. It can also cause worsening anxiety, heart palpitations, and headaches

Caffeine , Pyrilamine , Acetaminophen (Paracetamol) can be retained and analyzed using the Primesep SB stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN). Detection is performed using UV 310nm and LC MS ESI SIM 286.

You can find detailed UV spectra of Caffeine , Pyrilamine , Acetaminophen (Paracetamol) and information about its various lambda maxima by visiting the following links Acetaminophen , Caffeine , and Pyrilamine

Method Parameters

Mobile Phase	Gradient MeCN – 5% to 50%, 10 min
Buffer	Sulfuric Acid
Flow Rate	1.0 ml/min
Detection	UV 275
LOD*UV	1-10 ppb, 2- 8 ppb, 3 – 2 ppb
Class of Compounds	Drugs
Analyzing Compounds	Caffeine,Pyrilamine,Acetaminophen (Paracetamol)

HPLC Column Used

Primesep SB, 4.6 x 150 mm, 5 μ m, 100 A, dual ended

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