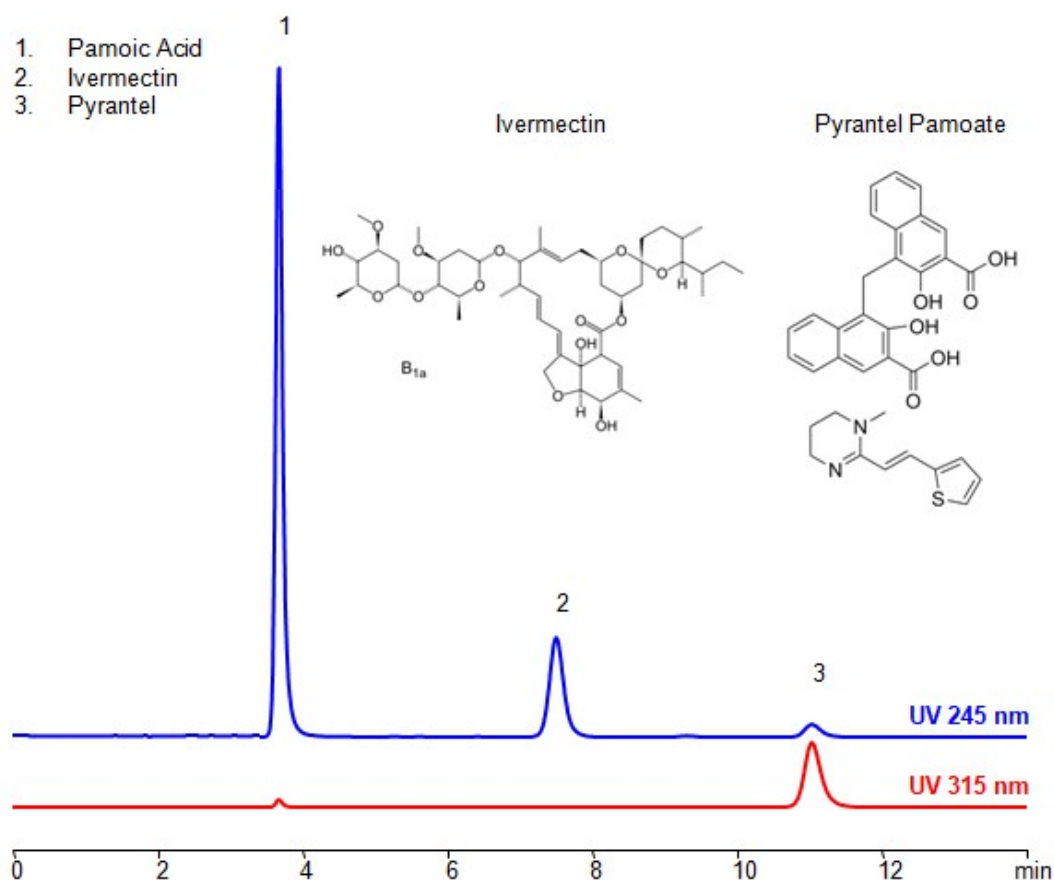


HPLC method for Separation Pamoic Acid, Ivermectin, Pyrantel on Primesep 100 Column

<https://sielc.com/hplc-method-for-analysis-pamoic-ivermectin-pyrantel>

Chromatogram



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN - 60%
Buffer:	H ₂ SO ₄ - 0.2%
Flow rate:	1.0 ml/min
Detection:	UV 245 nm, UV 315 nm
Sample:	Ivermectin – 0.25 mg/ml Pyrantel Pamoate – 0.25 mg/ml
LOD:	1. 2.6 ppb (245 nm) 2. 18 ppb (245 nm) 3. 29 ppb (315 nm)

Description

Pamoic acid, also known as embonic acid, is a compound with the chemical formula C₂₃H₁₆O₆. It is used in the formation of salts, particularly pamoate salts. The pamoate salts of various drugs are often employed to enhance their solubility, stability, and overall pharmaceutical properties. Pamoic acid itself is characterized by its ability to form stable complexes with a variety of drugs, and these complexes can be more easily processed into pharmaceutical formulations. The use of pamoic acid and its salts is common in the pharmaceutical industry to improve the bioavailability and effectiveness of certain medications. The formation of pamoate salts is a strategy employed in drug development to optimize the therapeutic delivery and performance of various pharmaceutical compounds. You can find detailed UV spectra of Pamoic acid and information about its various lambda

maxima by visiting the following link.

Ivermectin is an anti-parasitic drug with the chemical formula $C_{48}H_{74}O_{14}$. It is often used to treat or prevent parasites in animals and humans. In dogs, it is routinely used to treat heartworm, though, certain breeds, can be severely poisoned by this medication. It belongs to the class of drugs called avermectins. Ivermectin works by interfering with the nervous system of parasites, leading to their paralysis and eventual death. You can find detailed UV spectra of Ivermectin B1a and information about its various lambda maxima by visiting the following link.

Pyrantel is an anthelmintic or deworming medication with the chemical formula $C_{11}H_{14}N_2S$. It is commonly used to treat infections caused by roundworms and hookworms. Pyrantel works by causing neuromuscular blockade in the parasites, leading to their expulsion from the digestive tract. You can find detailed UV spectra of Pyrantel and information about its various lambda maxima by visiting the following link.

Pamoic acid, Ivermectin B1a, Pyrantel can be retained, separated and analyzed using a Primesep 100 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using UV 245 and 315 nm

Method Parameters

Mobile Phase	MeCN – 60%
Buffer	H ₂ SO ₄ -0.2%
Flow Rate	1.0 ml/min
Detection	UV 245, 315 nm
Samples	Ivermectin – 0.25 mg/ml Pyrantel Pamoate – 0.25 mg/ml
Injection volume	2 µl
LOD*	1. 2.6 ppb (245 nm) 2. 18 ppb (245 nm) 3. 29 ppb (315 nm)
Class of Compounds	Drugs
Analyzing Compounds	Pamoic acid, Ivermectin B1a, Pyrantel

HPLC Column Used

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

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