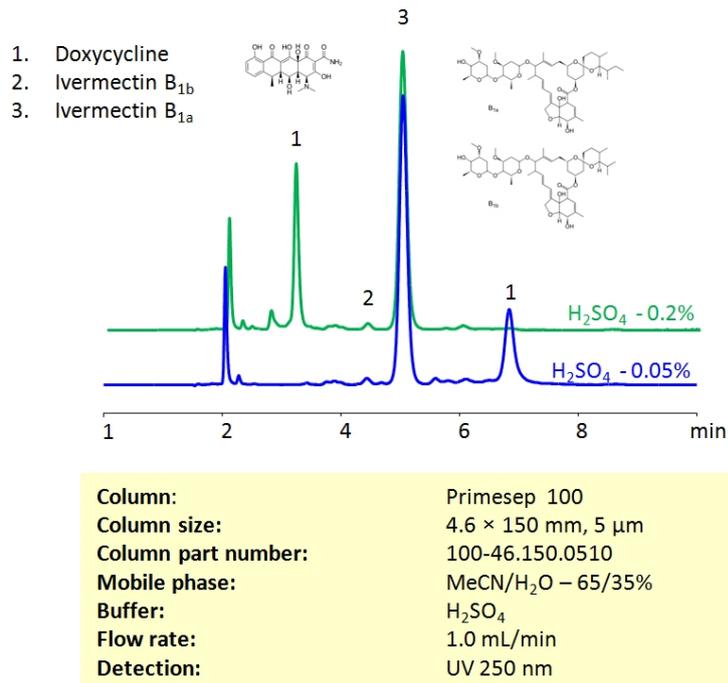


HPLC Method For Analysis Of Ivermectin and Doxycycline on Primesep 100 Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Ivermectin and Doxycycline

Ivermectin is an anti-parasitic drug. 1 Å variation has the chemical formula C₄₈H₇₄O₁₄. 1b has the chemical formula C₄₇H₇₂O₁₄. 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. You can find detailed UV spectra of Ivermectin B_{1a} and information about its various lambda maxima by visiting the following link.

Doxycycline is a broad spectrum antibiotic with the chemical formula C₂₂H₂₄N₂O₈. Outside of being an antibiotic, it is also said to have anti-inflammatory and anti-angiogenic properties. It is used primarily to treat Lyme disease, chronic prostatitis, sinusitis, pelvic inflammatory disease, acne, rosacea, and rickettsia. You can find detailed UV spectra of Doxycycline and information about its various lambda maxima by visiting the following link.

Ivermectin and Doxycycline can be retained and separated on the Primesep 100 mixed-mode column using an isocratic analytical method with a simple mobile phase of water, acetonitrile (MeCN, ACN), and sulphuric acid (H₂SO₄) buffer. The analysis method can be UV detected at 250 nm.

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 65/35%
Buffer	H ₂ SO ₄
Flow Rate	1.0 mL/min
Detection	UV, 250 nm

Quelle: <https://sielc.com/hplc-method-for-analysis-of-ivermectin-and-doxycycline>