HPLC Method for Analysis of Cortisone 21-Acetate on Primesep 100 Column

Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Cortisone 21-acetate is a synthetic corticosteroid used in the treatment of various inflammatory and autoimmune conditions. It is the acetate ester of cortisone, which increases its stability and bioavailability when administered.

Cortisone 21-acetate is a prodrug of cortisone, which is converted to its active form, cortisol, in the liver. Cortisol exerts its effects by binding to glucocorticoid receptors, which modulate the expression of anti-inflammatory proteins and inhibit the expression of pro-inflammatory proteins.

Cortisone 21-Acetate 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 phosphoric acid as a buffer. This method allows for detection using UV 200 nm.

You can find detailed UV spectra of Cortisone 21-Acetate and information about its various lambda maxima by visiting the following link .

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 50%
Buffer	H3PO4 -0.2%
Flow Rate	1.0 mL/min
Detection	UV 250 nm
Injection Volume	1 µl

Quelle: https://sielc.com/hplc-method-cortisone-21-acetate