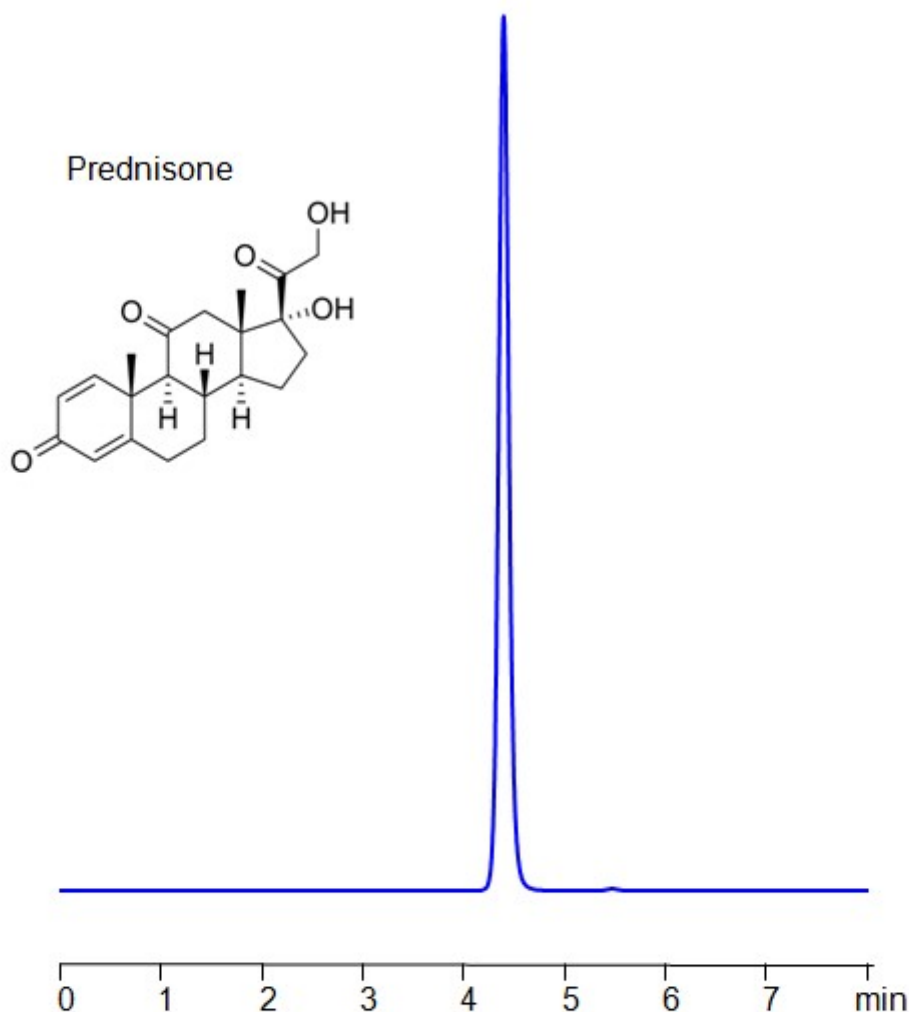


HPLC Method for Analysis of Prednisone on Primesep B Column

<https://sielc.com/hplc-method-for-analysis-prednisone>

Chromatogram



Column:	Primesep B
Column size:	4.6 × 150 mm, 5 µm
Column part number:	B-46.150.0510
Mobile phase:	MeCN - 35%
Buffer:	H ₂ SO ₄ - 0.1%
Flow rate:	1.0 ml/min
Detection:	UV 245 nm

Description

· HPLC Method for Analysis of Prednisone on Primesep B Column by SIELC Technologies

Prednisone is a synthetic corticosteroid with the chemical formula C₂₁H₂₆O₅. It belongs to the class of glucocorticoids. Prednisone is a prodrug, meaning that it is biologically inactive until it undergoes metabolic activation in the liver, where it is converted into its active form, prednisolone. Both prednisone and prednisolone have anti-inflammatory and immunosuppressant

properties and are used for various medical conditions. It mimics the action of cortisol, a natural steroid produced by the adrenal glands. It primarily exerts its effects by binding to glucocorticoid receptors and regulating gene expression. It is commonly used to treat inflammatory conditions, autoimmune disorders, allergic reactions, and certain cancers. It is also employed to suppress the immune system in conditions like organ transplantation and certain autoimmune diseases. Prednisone is often prescribed for respiratory conditions like asthma and chronic obstructive pulmonary disease (COPD). You can find detailed UV spectra of Prednisone and information about its various lambda maxima by visiting the following link. .

Prednisone can be retained, and analyzed using a Primesep B mixed-mode stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and sulfuric acid as a buffer. Detection is achieved using UV 245 nm

Method Parameters

Mobile Phase	MeCN/H ₂ O – 35%
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	1.0 ml/min
Detection	UV 245 nm
Class of Compounds	Corticosteroids
Analyzing Compounds	Prednisone

HPLC Column Used

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

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