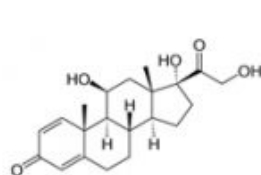


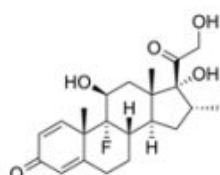
HPLC Method of Analysis for Dexamethasone and Prednisolone

<https://sielc.com/hplc-method-of-analysis-for-dexamethasone-and-prednisolone>

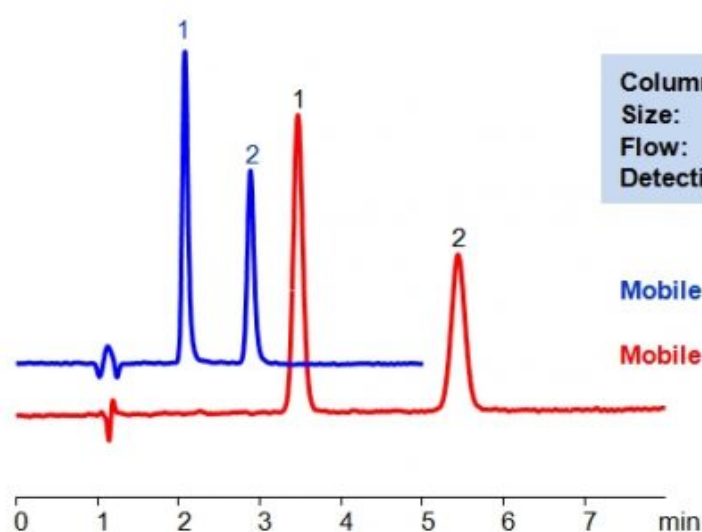
Chromatogram



1. Prednisolone



2. Dexamethasone



Column: Newcom A
Size: 3.2 x 100 mm, 3µm, 100A
Flow: 0.5 m/min
Detection: UV 275 nm

Mobile phase: MeCN/H₂O/Formic acid -35/65/0.2

Mobile phase: MeOH/H₂O/Formic acid -35/65/0.2

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Dexamethasone , Prednisolone .

Dexamethasone is a corticosteroid that is used as a replacement of the natural hormone produced by adrenal glands when the body can't produce enough on its own. It has also been found to reduce deaths among the critically ill patients with the COVID-19. Prednisolone is another corticosteroid used to treat a variety of inflammatory conditions and has a similar structure to dexamethasone. Both steroids can be retained and separated in HPLC using Newcom A mixed-mode column with the mobile phase consisting of either acetonitrile (ACN) or methanol (MeOH) and water with formic acid buffer. Methanol offers longer retention time compared to acetonitrile. UV detection at 275nm.

You can find detailed UV spectra of Dexamethasone , Prednisolone and information about its various lambda maxima by visiting the following link.

Method Parameters

Mobile Phase	MeCN, MeOH
Buffer	Formic Acid – 0.2%
Flow Rate	0.5 ml/min
Detection	UV, 275 nm

Class of Compounds	Drug, Acid, Hydrophilic, Ionizable
Analyzing Compounds	Dexamethasone, Prednisolone

HPLC Column Used

Newcrom A, 3.2 x 100 mm, 3 µm, 100 Å, dual ended

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