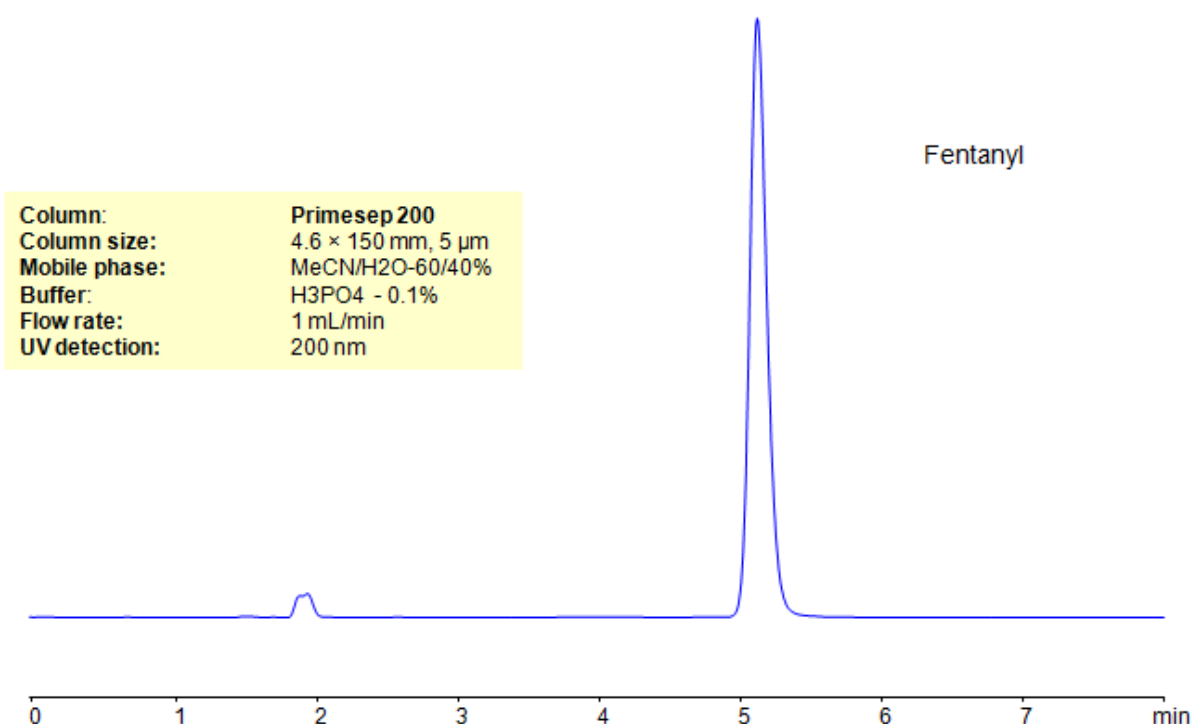


HPLC Determination of Fentanyl on Primesep 200 Column

<https://sielc.com/hplc-determination-of-fentanyl>

Chromatogram



HPLC Determination of Fentanyl

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Fentanyl , Fentanyl citrate .

Fentanyl is an opioid drug with the chemical formula $C_{22}H_{28}N_2O$. It is a DEA Schedule II controlled substance due to it's risk for potential abuse that could lead to a dependence. Fentanyl was developed in 1950 as an analgesic. It is often used to treat chronic cancer pain and surgical procedures. The compound does not appear in nature and is entirely laboratory made.

Fentanyl , Fentanyl citrate can be retained and analyzed using the Primesep 200 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a [buffer] buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 60/40%
Buffer	H ₃ PO ₄ – 0.1 %
Flow Rate	1.0 ml/min
Detection	UV, 200 nm
Class of compounds	Narcotic, Drug, Basic, Hydrophobic, Ionizable, Zwitterionic

Analyzing Compounds

Fentanyl, Fentanyl citrate

HPLC Column Used**Primesep 200, 4.6 x 150 mm, 5 µm, 100 Å, dual ended**[Order this column at hplc-shop.de →](https://www.hplc-shop.de)