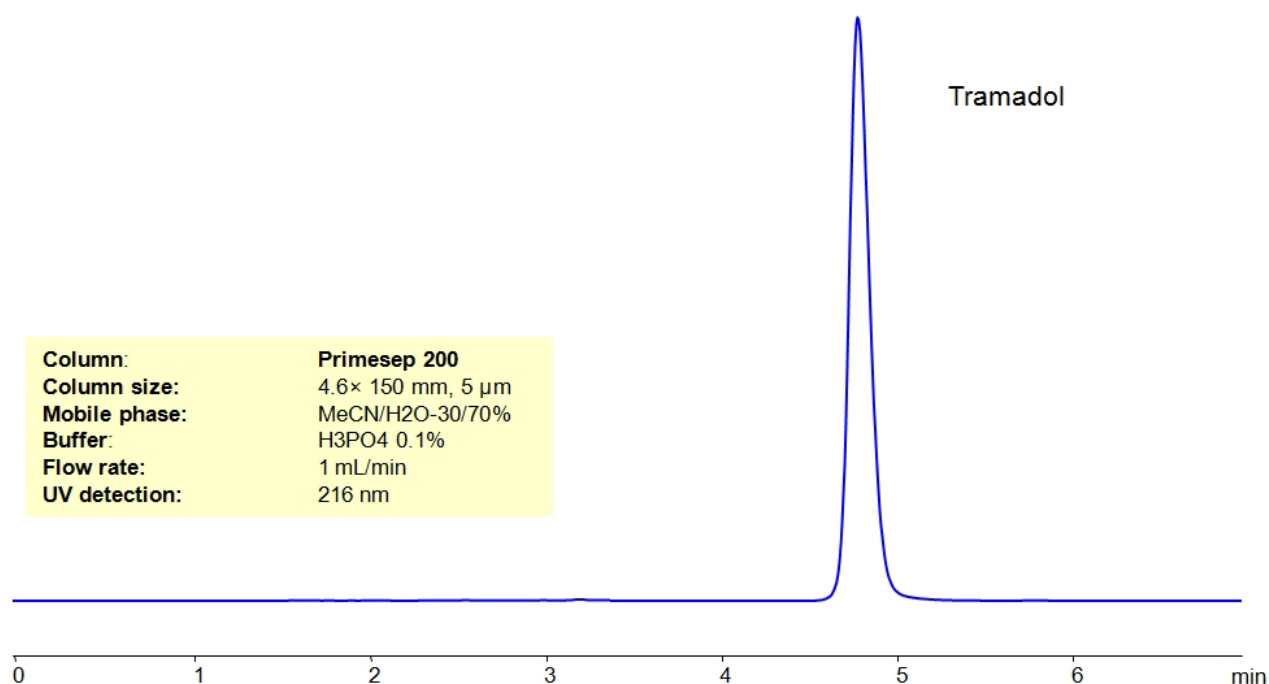


HPLC Determination of Tramadol in Tablets on Primesep 200 Column

<https://sielc.com/hplc-determination-of-tramadol-in-tablets>

Chromatogram



HPLC Determination of Tramadol in Tablets_1153

Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Tramadol hydrochloride , Tramadol

Tramadol is an opiate analgesic used to treat pain. It is a Schedule IV controlled substance within the U.S.

Tramadol is a narcotic analgesic used to manage severe pain. It is a synthetic codeine analogue. The way it works is similar to opioids, such as morphine and codeine due to it acting on specific opioid receptors. An overdose on the drug can cause acute liver failure. Tramadol, also known as Ultram and other brand names, is a synthetic opiate used to treat moderate to severe pain. The painkilling effects of Tramadol last for about 6 hours.

Tramadol 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). Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 30/70%
Buffer	H ₃ PO ₄ – 0.1%
Flow Rate	1.0 ml/min
Detection	UV, 216 nm
Class of Compounds	Drug, Narcotic, Zwitterionic, Hydrophobic, Ionizable

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)