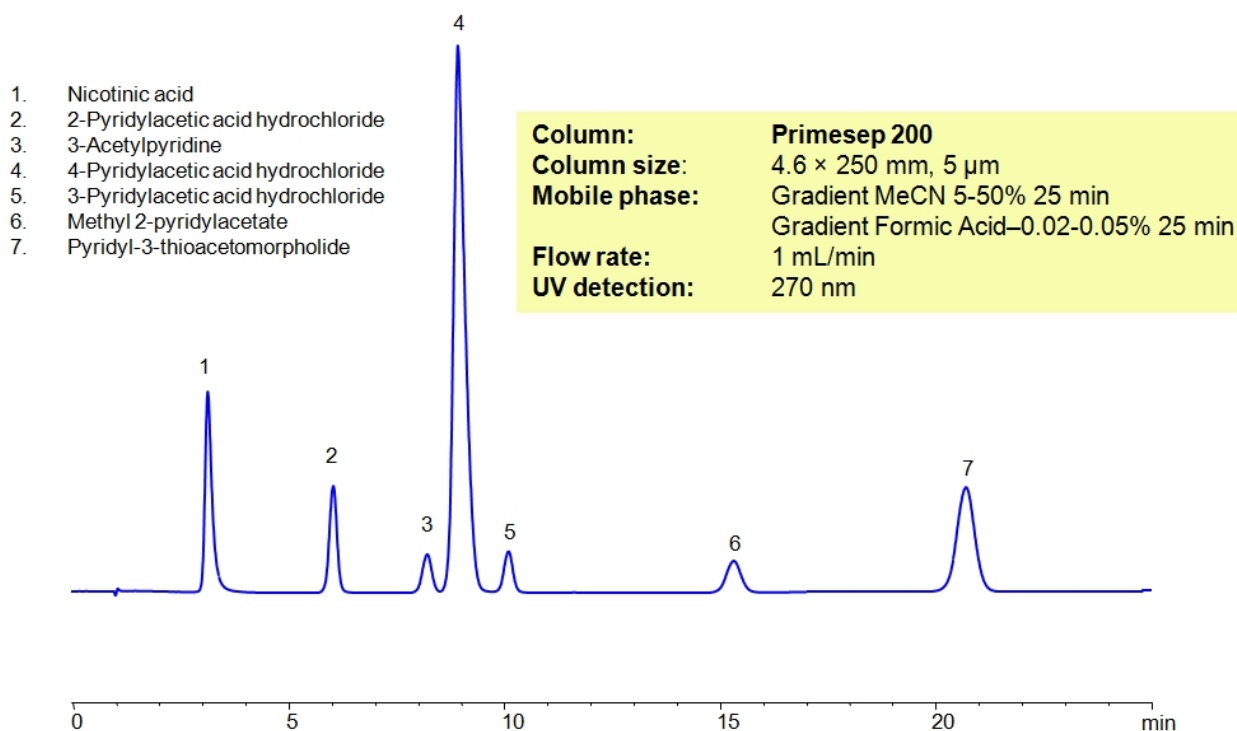


HPLC Separation Of Mixture of Pyridylacetic Acids And Their Derivatives

<https://sielc.com/hplc-separation-of-mixture-of-pyridylacetic-acids-and-their-derivatives>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of 2-Pyridylacetic acid hydrochloride , 3-Pyridylacetic acid hydrochloride , 4-Pyridylacetic acid hydrochloride , Nicotinic Acid/Niacin (3-pyridinecarboxylic acid) , 3-Acetylpyridine , Pyridyl-3-thioacetomorpholide

Pyridylacetic Acids are a class of compounds with a pyridine ring and an acetic acid. These acids are typically building blocks found in organic synthesis/ On occasion, they can also act as human xenobiotic metabolites.

Nicotinic acid , also known as niacin and vitamin B3, is a water-soluble B vitamin with $C_6H_5NO_2$ molecular formula. It is crucial for energy production.

Derivatives are compounds formed when the parent compound goes through a chemical reaction, replacing atoms with different ones, leading to different physical and chemical properties.

2-Pyridylacetic acid hydrochloride , 3-Pyridylacetic acid hydrochloride , 4-Pyridylacetic acid hydrochloride , Nicotinic Acid/Niacin (3-pyridinecarboxylic acid) , 3-Acetylpyridine , Pyridyl-3-thioacetomorpholide can be retained and analyzed using the Primesep 200 stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a formic acid buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H2O Gradient – 5-50%
Buffer	CH2O2 – 0.02-0.05%

Flow Rate	1.0ml/min
Detection	UV, 270 nm
Class of Compounds	Acids
Analyzing Compounds	2-Pyridylacetic acid hydrochloride,3-Pyridylacetic acid hydrochloride,4-Pyridylacetic acid hydrochloride,Nicotinic Acid/Niacin (3-pyridinecarboxylic acid),3-Acetylpyridine,Pyridyl-3-thioacetomorpholide

HPLC Column Used

Primesep 200, 4.6 x 250 mm, 5 µm, 100 A, dual ended

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