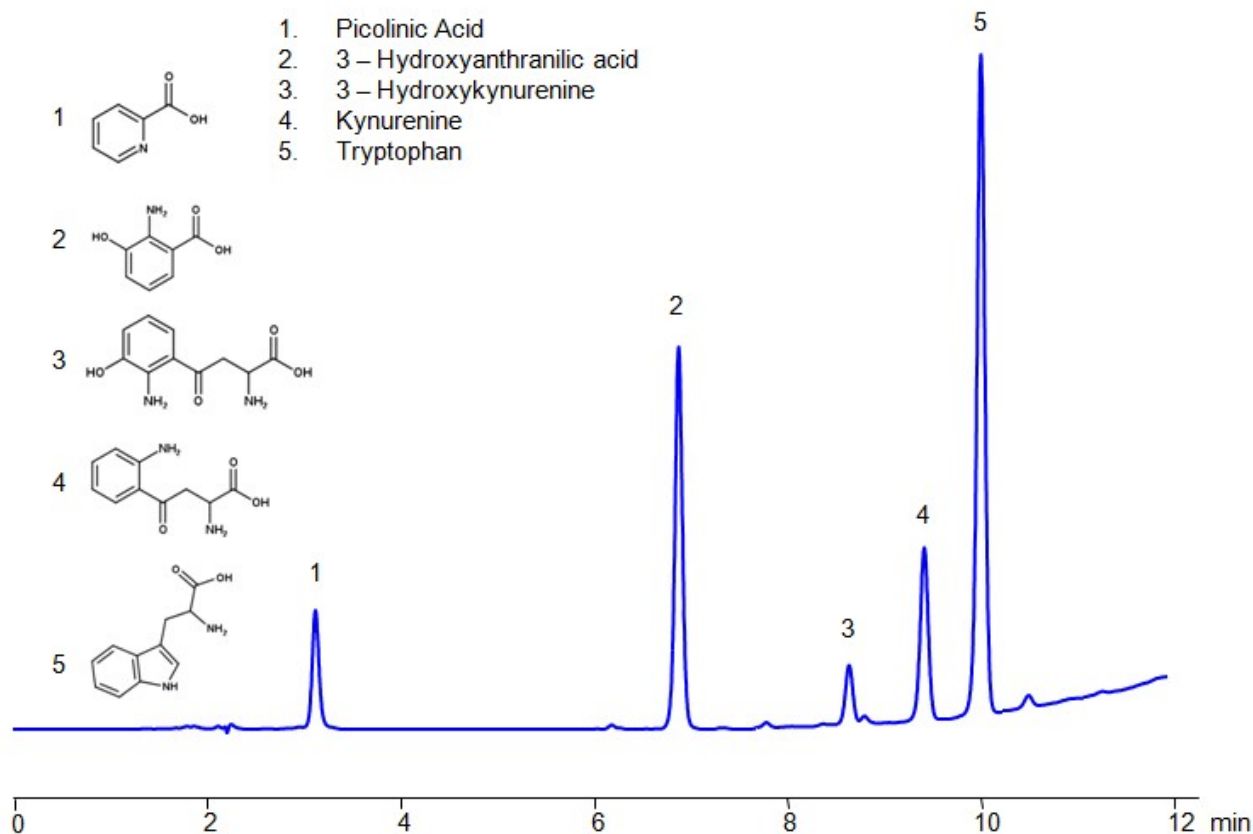


HPLC Method for Separation of a Mixture of Tryptophan and its Catabolites on Primesep 100 Column

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

Chromatogram



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100 - 46.150.0510
Mobile phase:	Gradient MeCN 5-50% in 10 min, with 2 min hold afterwards
Buffer:	Gradient H ₂ SO ₄ from 0.1-0.2% in 10 min, with 2 min hold afterwards
Flow rate:	1.0 mL/min
Detection:	UV 220 nm

Description

· Separation type: Liquid Chromatography Mixed-mode

HPLC Method for Analysis of Mixture of Tryptophan and its Catabolites on Primesep 100 Column by SIELC Technologies

Tryptophan and its catabolites participate in several biological pathways, having roles in protein synthesis, serving as precursors to bioactive molecules, and influencing several physiological processes. Here's an overview considering a mixture of tryptophan and its catabolites:

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Tryptophan and its Catabolites can be retained, separated and analyzed on a Primesep 100 mixed-mode stationary phase column using an gradient analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a sulfuric acid as a buffer. This analysis method can be detected using UV at 220 nm.

Method Parameters

Mobile Phase	Gradient MeCN 5-50% in 10 min, with 2 min hold afterwards
Buffer	Gradient H ₂ SO ₄ from 0.1-0.2% in 10 min, with 2 min hold afterwards
Flow Rate	1.0 ml/min
Detection	UV 220 nm
Class of Compounds	Essential Amino Acid Tryptophan and its Catabolites
Analyzing Compounds	Tryptophan, Picolinic Acid, Kynurenine, 3-Hydroxykynurenine, 3-Hydroxyanthranilic acid

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 µm, 100 A, dual ended

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