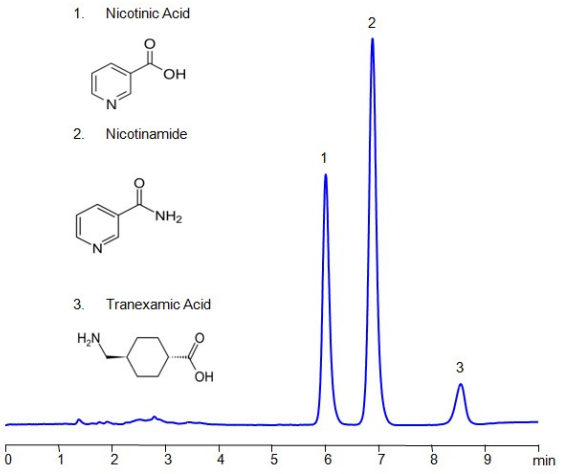
HPLC Method for Separation of Nicotinic Acid, Nicotinamide, Tranexamic Acid on Primesep 100 Column



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN - 40%
Buffer:	H_2SO_4 - 0.05%
Flow rate:	1.0 ml/min
Detection:	UV 210 nm

Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Nicotinic acid and nicotinamide are both forms of vitamin B3, also known as niacin. They play crucial roles in the body's energy metabolism and are essential for maintaining the health of the skin, nervous system, and digestive system.

Tranexamic acid, on the other hand, is a synthetic derivative of the amino acid lysine. It is primarily used as an antifibrinolytic agent, meaning it helps to prevent the breakdown of blood clots. Tranexamic acid is commonly used to treat or prevent excessive bleeding, particularly in conditions such as heavy menstrual bleeding, traumatic hemorrhage, and during surgeries where significant blood loss is expected. Additionally, it has been investigated for its potential role in treating melasma, a common skin condition characterized by hyperpigmentation.

Each of these compounds has distinct biochemical properties and medical applications, but they all play important roles in human health and medicine.

Nicotinic Acid, Nicotinamide, Tranexamic Acid can be retained and separated using a Primesep 100 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using UV at 210 nm

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN40%
Buffer	H2SO4 – 0.05%
Flow Rate	1.0 mL/min
Detection	UV 210 nm

Quelle: https://sielc.com/hplc-method-for-analysis-nicotinic-acid-nicotinamide-tranexamic-acid