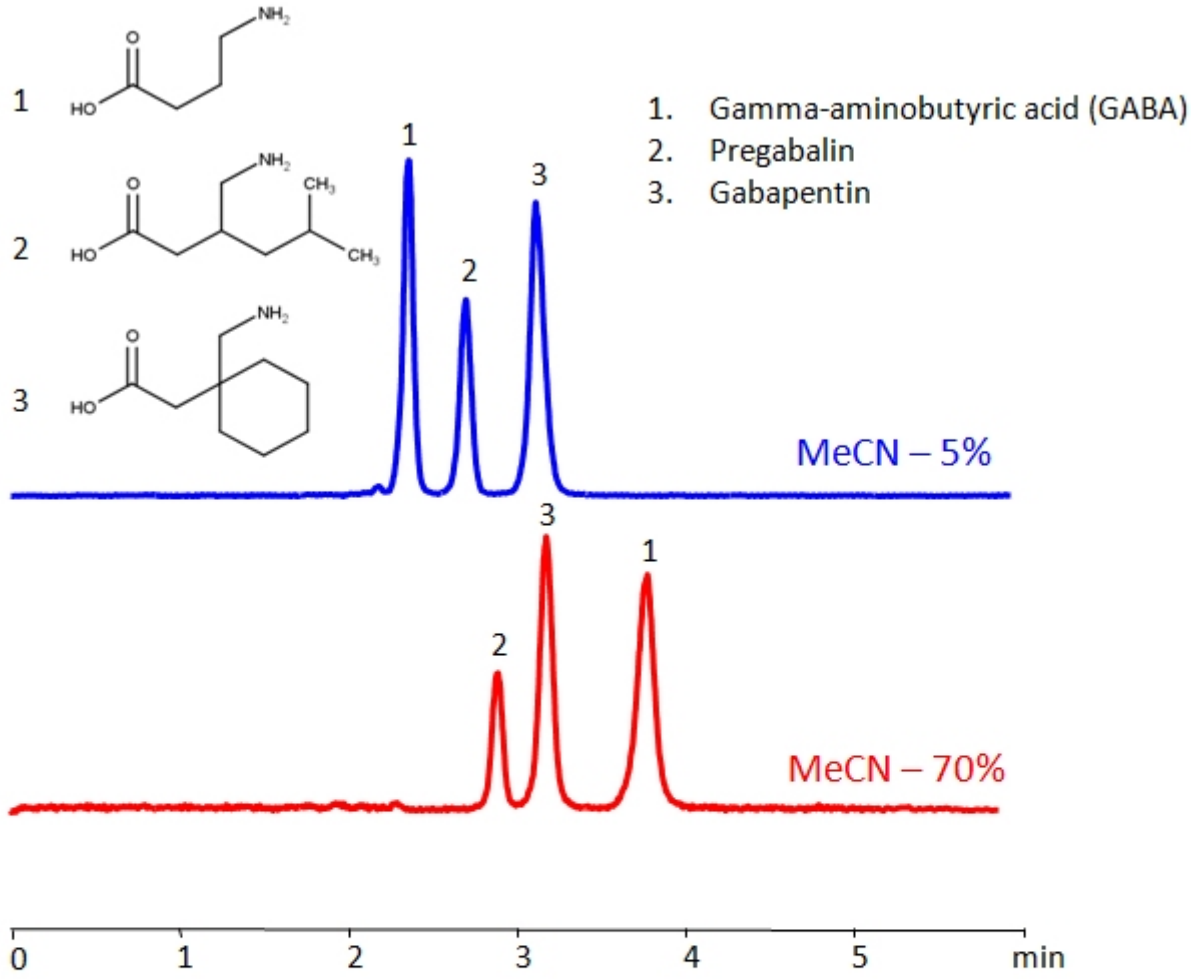
HPLC Determination of Gamma-aminobutyric Acid (GABA), Gabapentin and Pregabalin on Primesep N Column

https://sielc.com/hplc-determination-of-gamma-aminobutyric-acid-gaba-gabapentin-and-pregabalin

Chromatogram



Column:	Primesep N
Column size:	4.6 × 150 mm, 5 µm
Column part number:	N-46.150.0510
Mobile phase:	MeCN/H2O
Buffer:	Am Fm pH 3.0 – 10 mM
Flow rate:	1 mL/min
Detection:	CAD (MS-compatible mobile phase)

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of GABA, Gabapentin and Pregabalin

Gamma-Aminobutyric Acid (GABA) is a neurotransmitter with the chemical formula C 4 H 9 NO 2 . It is crucial in the nervous system for reducing anxiety and promoting sleep. It is naturally produced in the body, but can also be found in supplements and some fermented foods.

Pregabalin is a medication with the chemical formula C 8 H 17 NO 2 . It is an anticonvulsant, analgesic, and anxiolytic amino acid that is used to treat epilepsy, restless leg syndrome, anxiety, neuropathic pain, and fibromyalgia. In the US it is used for adjunctive therapy for adults, while in the European Union, United Kingdom, and Russia, it is approved for treatment of generalized anxiety.

Gabapentin is a prescription medication with the chemical formula C 9 H 17 NO 2 . It is used to treat epilepsy, neuropathic pain, hot flashes, and restless legs syndrome. Occasionally, Gabapentin is also used to treat anxiety and sleep disorders.

Method Parameters

Mobile Phase	MeCN/H2O
Buffer	AmFm pH 3.0 – 10 mM
Flow Rate	1.0 ml/min
Detection	CAD (Corona) (MS-compatible mobile phase)
Class of Compounds	Acid, Drug
Analyzing Compounds	gamma-Aminobutyric Acid (GABA),Gabapentin,Gabapentin hydrochloride,Pregabalin

HPLC Column Used

Primesep N, 4.6 x 150 mm, 5 µm, 300 A, dual ended

Order this column at hplc-shop.de →