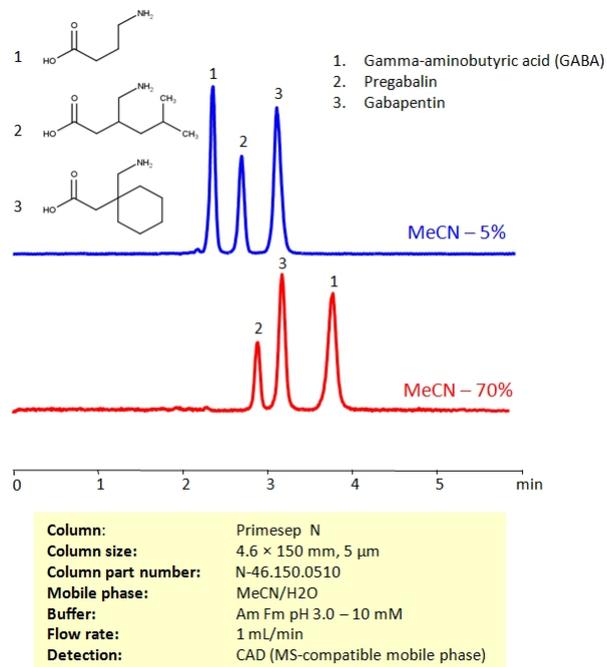


## HPLC Determination of Gamma-aminobutyric Acid (GABA), Gabapentin and Pregabalin on Primesep N Column



### 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<sub>4</sub>H<sub>9</sub>NO<sub>2</sub> . 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<sub>8</sub>H<sub>17</sub>NO<sub>2</sub> . 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<sub>9</sub>H<sub>17</sub>NO<sub>2</sub> . 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

<b>Column</b>	Primesep N, 4.6 x 150 mm, 5 µm, 300 Å, dual ended
<b>Mobile Phase</b>	MeCN/H2O
<b>Buffer</b>	AmFm pH 3.0 – 10 mM
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	CAD (Corona) (MS-compatible mobile phase)

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