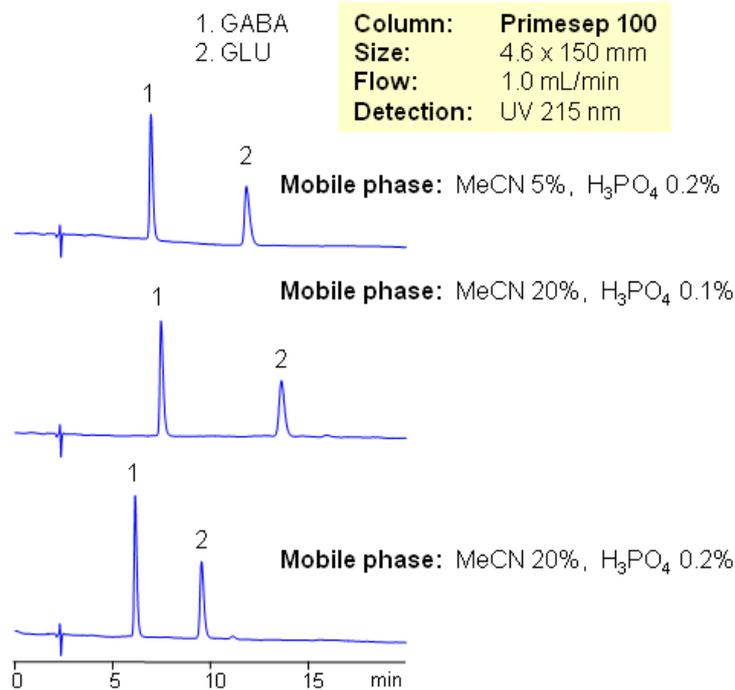


## HPLC Separation of GABA and GLU



Amino acids are building blocks for peptides and proteins; they are used in various supplement formulations and as starting reagents in chemistry to introduce chirality. GABA and GLU are used to enhance growth of specified plants, prevent development of powdery mildew on grapes, and suppress certain other plant diseases. L-Glutamic acid is one of the major amino acids naturally found in plant and animal proteins, and GABA helps to maintain normal brain function. Both amino acids behave as neurotransmitters. All amino acids have both basic and acidic groups. Depending on pH amino acids can be basic, acidic or zwitter-ionic. Due to the polar nature of underivatized amino acids, analysis is a very challenging task. Derivatization and ion-pairing reagents are used to provide retention of amino acids. Simple method is developed on Primesep 100 column using combination of acetonitrile/water with phosphoric acid as a mobile phase. Method uses UV detection. Amino acids are well retained without use of ion-pairing reagents. Fast reliable method can be developed for all underivatized natural and synthetic amino acids.

### Method Parameters

<b>Column</b>	Primesep 100, 4.6x150 mm, 5 µm, 100 Å
<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O
<b>Buffer</b>	H <sub>3</sub> PO <sub>4</sub>
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	UV, 215 nm

Quelle: <https://sielc.com/Application-HPLC-Separation-of-GABA-and-GLU>