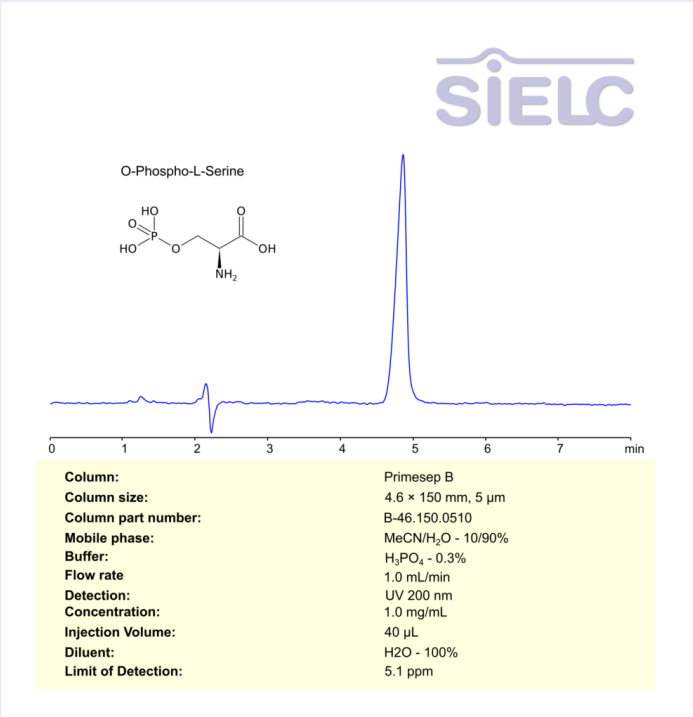
HPLC Method for Analysis of Phosphoserine on Primesep B Column



Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Phosphoserine is a phosphorylated derivative of the amino acid serine, formed when a phosphate group is attached to its hydroxyl group. It plays a key role in cellular signaling and metabolic processes, serving as a precursor for the biosynthesis of important biomolecules like phospholipids, proteins, and nucleotides. Phosphoserine is also involved in protein phosphorylation, a critical post-translational modification regulating enzyme activity and signal transduction pathways.

Phosphoserine can be retained, separated and analyzed using a Primesep B mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and phosphoric acid as a buffer. This method allows for detection using UV 200 nm.

Method Parameters

Column	Primesep B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 10%
Buffer	H3PO4 – 0.3%
Flow Rate	1.0 mL/min
Detection	UV 200
Sample	1.0 mg/mL

Quelle: https://sielc.com/hplc-method-phosphoserine

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