

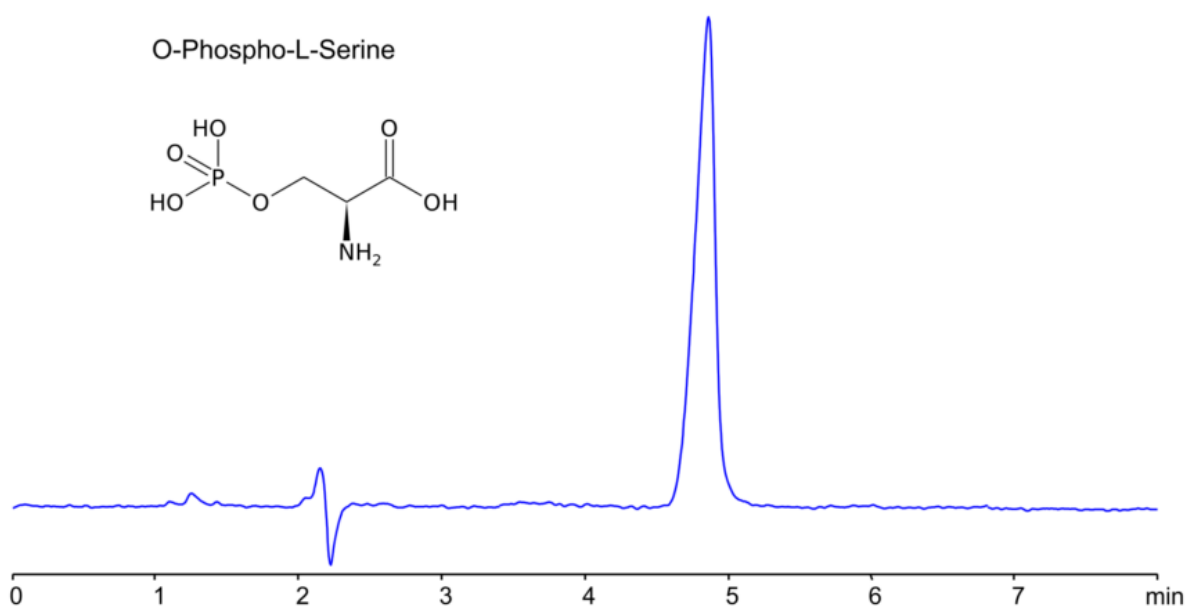
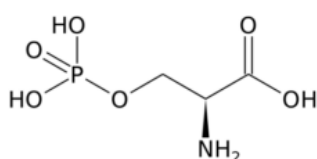
HPLC Method for Analysis of Phosphoserine on Primesep B Column

<https://sielc.com/hplc-method-phosphoserine>

Chromatogram

siELC

O-Phospho-L-Serine



Column:	Primesep B
Column size:	4.6 × 150 mm, 5 µm
Column part number:	B-46.150.0510
Mobile phase:	MeCN/H ₂ O - 10/90%
Buffer:	H ₃ PO ₄ - 0.3%
Flow rate	1.0 mL/min
Detection:	UV 200 nm
Concentration:	1.0 mg/mL
Injection Volume:	40 µL
Diluent:	H ₂ O - 100%
Limit of Detection:	5.1 ppm

Description

· Separation type: Liquid Chromatography Mixed-mode SIELC Technologies · HPLC Method for Analysis of Phosphoserine on Primesep B Column

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

Mobile Phase	MeCN – 10%
Buffer	H3PO4 – 0.3%
Flow Rate	1.0 ml/min
Detection	UV 200
Sample	1.0 mg/mL
Diluent	H2O- 100%
LOD*	5.1 ppm
Class of Compounds	Amino acid
Analyzing Compounds	Phosphoserine

HPLC Column Used

Primesep B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)