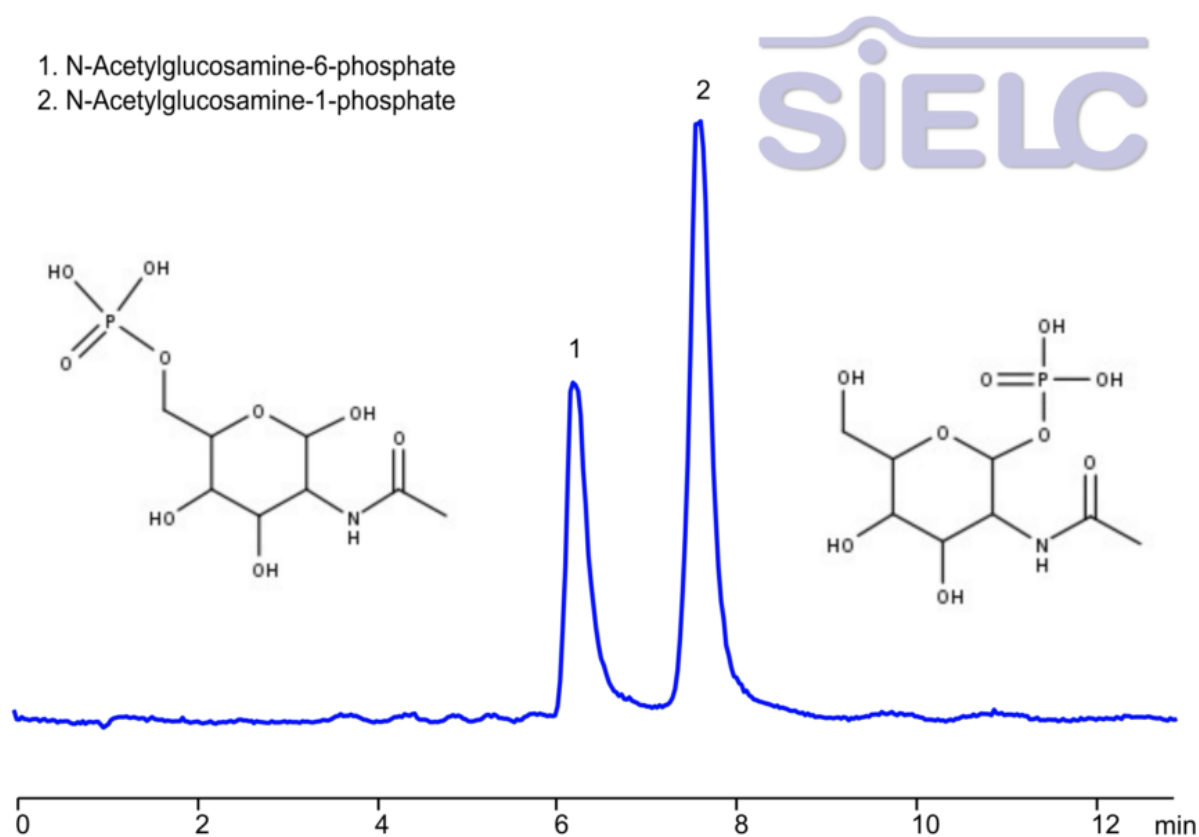


LCMS Method for Analysis of N-Acetylglucosamine-6-phosphate and N-Acetylglucosamine-1-phosphate on Newcrom B Column

<https://sielc.com/hplc-method-for-analysis-of-glcnac-6-p>

Chromatogram



Column:	Newcrom B
Column size:	3.2×150 mm, 3 µm
Column part number:	NB-32.150.0310
Mobile phase:	MeCN/H ₂ O – 60/40%
Buffer:	Formic Acid – 1.0%
Flow rate	0.5 ml/min
Detection:	SIM 300 -, SIM 302 +
Sample:	0.5 mg/ml
Diluent:	MeCN - 50%

Description

HPLC Method for Analysis of N-Acetylglucosamine-1-phosphate , N-Acetylglucosamine-6-phosphate on Newcrom B Column by SIELC Technologies

N-Acetylglucosamine-6-phosphate (GlcNAc-6-P) and N-Acetylglucosamine-1-phosphate (GlcNAc-1-P) are two phosphorylated derivatives of N-acetylglucosamine (GlcNAc), a monosaccharide that is part of various biological structures, such as glycoproteins and glycosaminoglycans.

Both GlcNAc-6-P and GlcNAc-1-P are involved in the regulation of metabolism and glycosylation, but they differ in the position of the phosphate group on the glucose structure.

N-Acetylglucosamine-6-phosphate (GlcNAc-6-P) and N-Acetylglucosamine-1-phosphate (GlcNAc-1-P) can be retained, separated and analyzed using an Newcrom B mixed-mode stationary phase column. The analysis employs a gradient method with a simple mobile phase consisting of water, acetonitrile (MeCN), and formic acid as a buffer. Detection is achieved using LC MS.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 60/40 %
Buffer	Formic Acid – 1.0%
Flow Rate	0.5 ml/min
Detection	SIM 300 -, SIM 302 +
Sample	0.5 mg/ml
Injection volume	1 µl
LOD*	300 ppb
Class of Compounds	Amino sugars
Analyzing Compounds	N-Acetylglucosamine-1-phosphate, N-Acetylglucosamine-6-phosphate

HPLC Column Used

Newcrom B, 3.2 x 150 mm, 3 µm, 100 Å, dual ended

[Order this column at **hplc-shop.de** →](#)