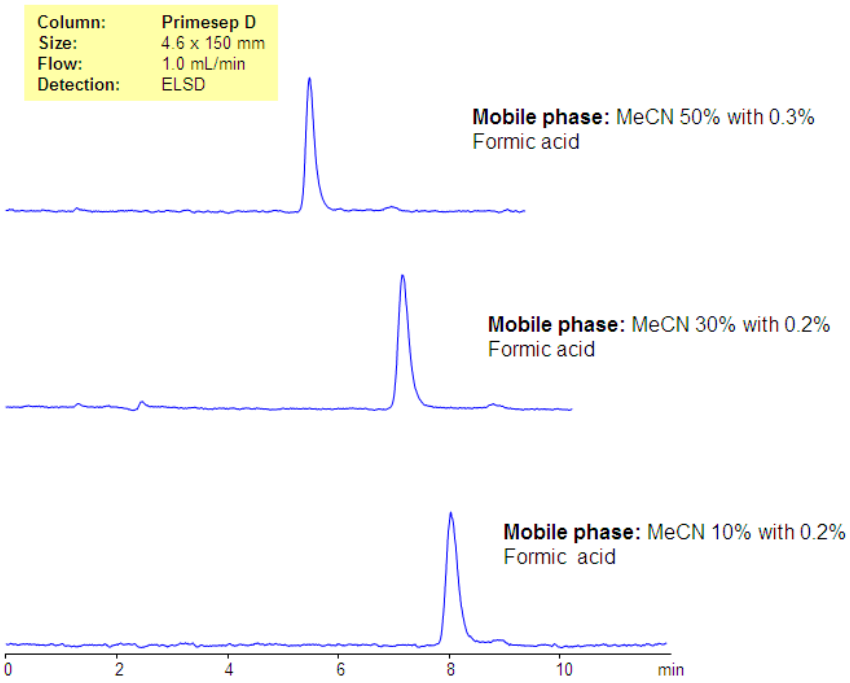
Retention of Sialic Acid on Primesep D Column



Sialic acid is a nitrogen or oxygen substituted neuraminic acid. It is a sugar-based derivative with very polar properties. The N-substituted compound is acidic in nature. Sialic acid has no retention in reversed-phase, unless an ion-pairing reagent is used. The method for analysis of sialic acid was developed on the Primesep D reversed-phase anion-exchange column. The method is compatible with ELSD and LC/MS and also can be used for the analysis of sialic acid in biological fluids like blood, serum, urine, etc. Retention time of sialic acid is controlled by the pH of the mobile phase and the buffer concentration. It is retained by very weak, reversed-phase and weak, anion-exchange mechanisms.

Method Parameters

Column	Primesep D, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
Buffer	Formic Acid
Flow Rate	1.0 mL/min
Detection	ELSD

Quelle: https://sielc.com/Application-Retention-of-Sialic-Acid-on-Primesep-D-Column