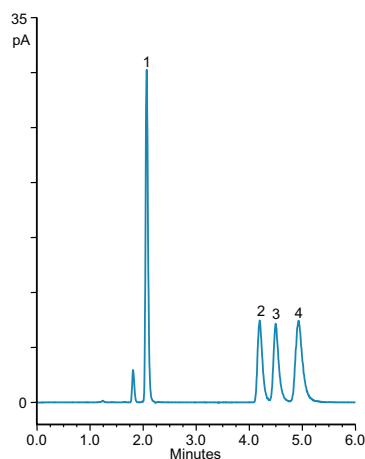


## Sugar Phosphates Using GlycanPac AXH-1



Column: Thermo Scientific™ GlycanPac™ AXH-1, 1.9  $\mu$ m  
 Dimensions: 2.1  $\times$  150 mm  
 LC System: Thermo Scientific™ Dionex™ UltiMate™ 3000RS  
 Mobile Phases: A: Acetonitrile  
 B: 100 mM ammonium formate, pH 3.5  
 Isocratic: 80% A, 20% B  
 Flow: 0.30 mL/min  
 Temperature: 30 °C  
 Injection: 2  $\mu$ L  
 Detector: Thermo Scientific™ Dionex™ Corona™ Veo charged aerosol detector, (evaporator 45 °C, data rate 5 Hz, filter 1 sec, power function 1.5)  
 Sample: standards 42  $\mu$ g/mL in mobile phase  
 Peaks:  
 1. Sodium  
 2. Fructose-6-phosphate  
 3. Glucose-1-phosphate  
 4. Glucose-6-phosphate

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The phosphate esters of simple sugars are significant metabolic intermediates. Previous chromatographic approaches have included ion-pair, HILIC-mode, and anion exchange. The GlycanPac AXH-1 is a column designed to classify anionic carbohydrates by charge and resolve them by HILIC interactions. For this group of simple sugar phosphates, an isocratic analysis is sufficient using a volatile mobile phase that is compatible with charged aerosol detection or mass spectrometry.