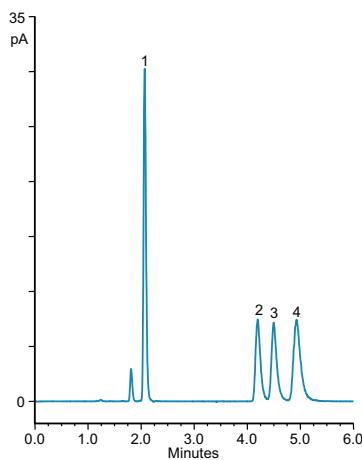


Sugar Phosphates Using GlycanPac AXH-1



Column: Thermo Scientific™ GlycanPac™ AXH-1, 1.9 μ m
Dimensions: 2.1 x 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 μ 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 μ 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.