Various sweeteners were analyzed using Asahipak NH2P-40 2D, a polymer-based amino column, with LC/MS/MS detection. Anion substances can be eluted under alkaline conditions. Furthermore, alkaline conditions promote the deprotonation of hydroxyl groups at the time of ionization. Therefore, alkaline conditions are suitable for high sensitive detection of substances with hydroxyl groups such as saccharides under the negative mode.

Sample: 5μL, 50ng/mL each (in H2O/CH3CN=1/3)
Sucratose, Acesulfame, Aspartame, Saccharin, Fructose, Glucose, Rebaudioside A, Sucrose, Lactose

Column: Shodex Asahipak NH2P-40 2D (2.0mmI.D. x 150mm)
Eluent: (A) 0.1% NH3 aq./ (B) CH3CN Isocratic; (B%) 80%
Flow rate: 0.2mL/min
Detector: ESI-MS (SIM Negative)
Column temp.: 30°C