

apHera Amino HPLC Columns

Optimized for the separation of mono- and oligosaccharides

The small, robust PVA copolymer bead provides mechanical and chemical strength as well as high column efficiency. Amino phases are used in normal phase or HILIC as well as anion-exchange when pH is controlled. Conventional amino columns based on silica do not show long column life and steadily lose retention, perhaps due to hydrolysis of the silica particle by the basic amino group or loss of the amino phase itself.

Features

- Ideal for LC-MS detection
- pH range 2-12
- Stable, predictable retention
- Amenable to washing with alkaline solutions
- HILIC

Applications

- mono- to oligosaccharides
- carbohydrates/sugars
- ascorbic and erythorbic acid
- taurine and methionine
- polar drugs and many more!

Figure 1. Comparison of Five Simple Underivatized Sugars Separated on apHera™ NH₂ vs Aminopropyl Silica

Column1A: apHera NH₂, 15 cm x 4.6 mm I.D., 5 µm particles (56401AST)
 Column 1B: aminopropyl silica column, 15 cm x 4.6 mm I.D., 5 µm particles
 mobile phase: 20:80, water:acetonitrile
 flow rate: 1.0 mL/min.
 temp.: 25 °C
 det.: ELSD, 45 °C, 3.5 psi nitrogen
 injection: 10 µL
 sample: 500 µg/mL in 30:70, water:acetonitrile

1. D-(-)-arabinose
2. D-(+)-xylose
3. D-(+)-mannose
4. D-(+)-galactose
5. D-(+)-glucose

Figure 1A. apHera™ NH₂

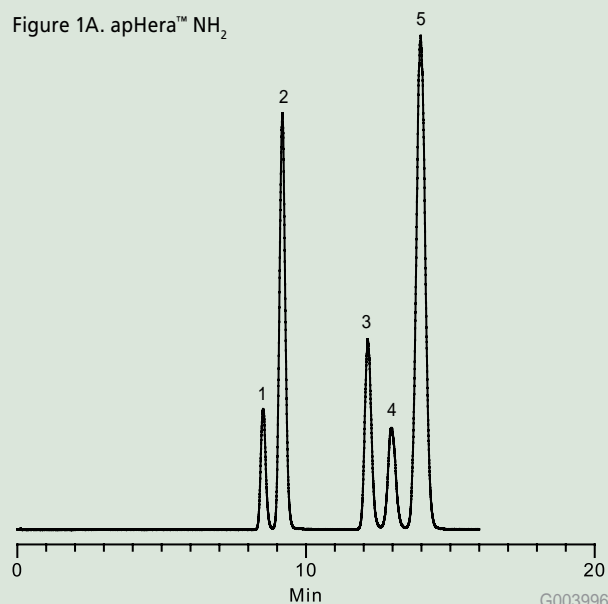


Figure 1B. Aminopropyl silica

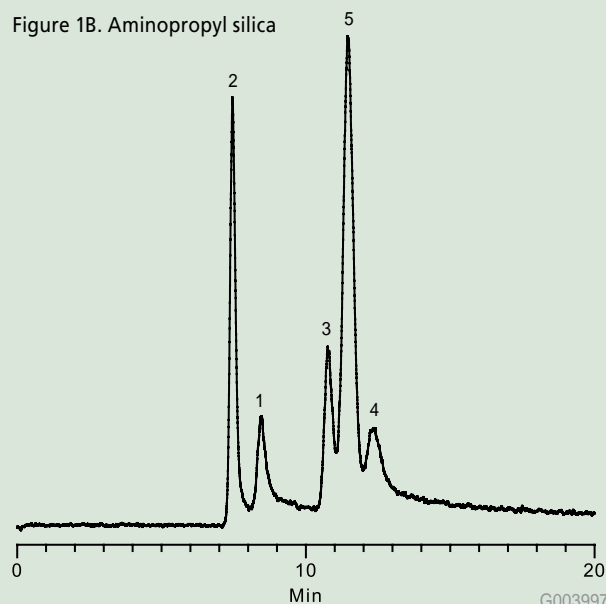
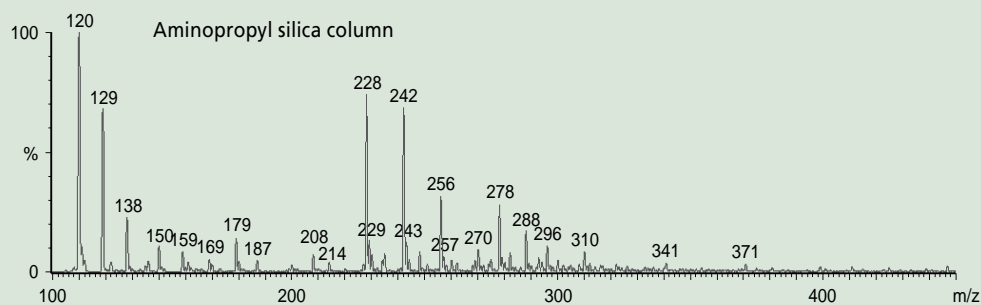
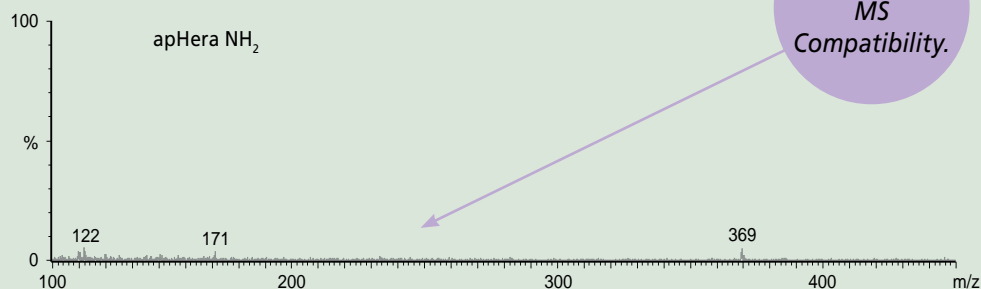




Figure 2. Analysis of Column Effluent by MS

columns: 25 cm x 4.6 mm I.D., 5 µm particles
 mobile phase: 20:80, 25 nM sodium chloride in water:acetonitrile
 flow rate: 1.0 mL/min.
 temp.: 25 °C
 det.: ESI (+), scan range 110 – 450 m/z

*Low Bleed.
MS
Compatibility.*



Ordering Information

apHera Columns

	Length (cm)	I.D. (mm)	Cat. No.
apHera NH₂	15	4.6	56401AST
	25	4.6	56403AST
	15	2.0	56400AST
apHera C18	15	4.6	56102AST
	25	4.6	56103AST
	15	2.0	56100AST

	Length (cm)	I.D. (mm)	Cat. No.
apHera C8	15	4.6	56202AST
	25	4.6	56203AST
apHera C4	15	4.6	56302AST
	25	4.6	56303AST

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*Accelerating Customers'
 Success through Innovation and
 Leadership in Life Science,
 High Technology and Service*

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