

Ascentis® Express HILIC HPLC Columns

Ascentis Express columns provide a breakthrough in HPLC column performance. Based on Fused-Core™ particle technology, Ascentis Express provides the benefits of sub 2 micron particles at much lower backpressure. Ascentis Express HILIC columns offer these same benefits to HILIC mode chromatography.

HILIC chromatography is complementary to reversed-phase separations due to increased retention for polar compounds. The elution order is typically the opposite of that for C18 with the non-polar compounds eluting early and the highly polar compounds having greater retention and selectivity.

Key Benefits of Ascentis Express

- Double the efficiency of 3 micron columns
- Same efficiency of sub 2 micron columns at half of the backpressure
- Rugged design capable of ultra high pressure operation

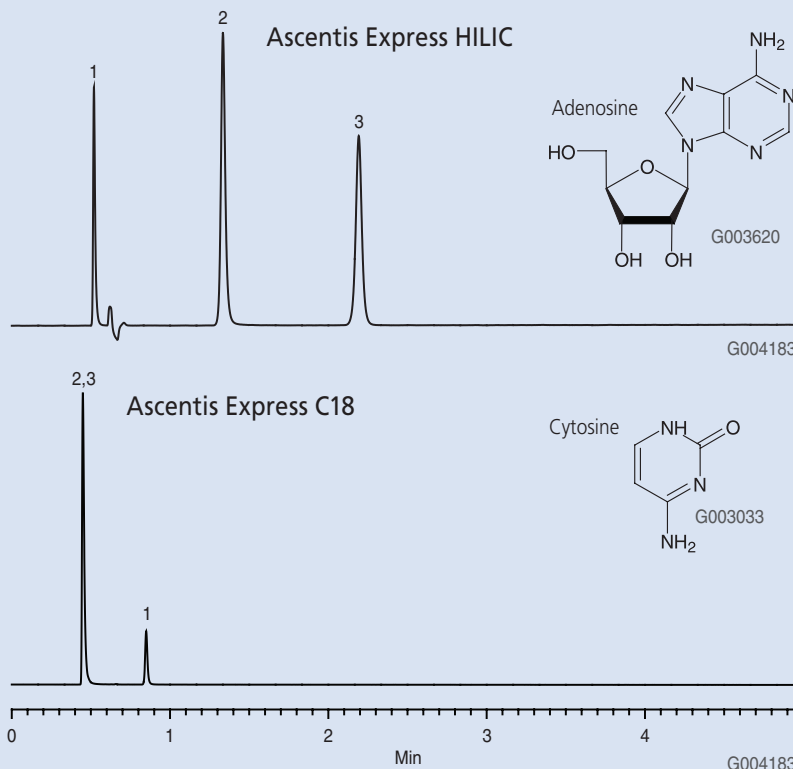
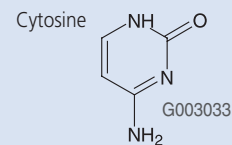
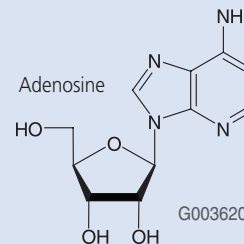
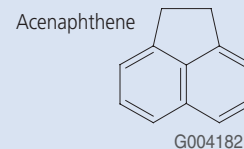
Key Benefits of HILIC

- Retention of highly polar analytes like metabolites
- Increased MS sensitivity
- Orthogonal selectivity to C18

Comparison of the Analysis of Polar Molecules on Ascentis Express HILIC and Ascentis Express C18

columns: Ascentis Express HILIC, 10 cm x 2.1 mm ID, 2.7 µm particles (53939-U)
 Ascentis Express C18, 10 cm x 2.1 mm ID, 2.7 µm particles (53823-U)
 mobile phase: 10:90; 100 mM ammonium formate, pH 3.0 with concentrated formic acid:Acetonitrile
 flow rate: 0.4 mL/min
 temp.: 35 °C
 det.: UV at 254 nm
 injection volume: 1 µL

1. Acenaphthene, 80 µg/mL in mobile phase
2. Adenosine, 35 µg/mL in mobile phase
3. Cytosine, 75 µg/mL in mobile phase



Ordering Information

ID (mm)	Length (cm)	Ascentis Express HILIC
2.1	5	53934-U
2.1	10	53939-U
2.1	15	53946-U
4.6	5	53975-U
4.6	10	53979-U
4.6	15	53981-U

For more information on *Ascentis Express HPLC Columns*, call our technical experts at **800-359-3041/814-359-3041** or visit sigma-aldrich.com/express

TRADEMARKS

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**Mixed Sources**

Product group from well-managed forests, controlled sources and recycled wood or fiber
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