

Ascentis® Express Capillary HPLC Columns with Fused-Core™ Technology

Ascentis Express columns provide a breakthrough in HPLC column performance. Based on Fused-Core particle technology, Ascentis Express provides the benefits of high speed and high efficiencies of sub-2 µm particles. The Fused-Core particle consists of a 1.7 µm solid core and a 0.5 µm porous shell allowing for a smaller diffusion path (0.5 µm) compared to conventional fully porous particles.

The new C8 and C18 capillary columns provide classic reversed-phase selectivity with lower backpressure than sub-2 µm columns and higher peak capacities than traditional columns. Figure 1 shows how the Ascentis Express capillary columns, with their 90 angstrom pore size, are ideal for peptides and digests. The recommended molecular weight range is 3000 amu or less.

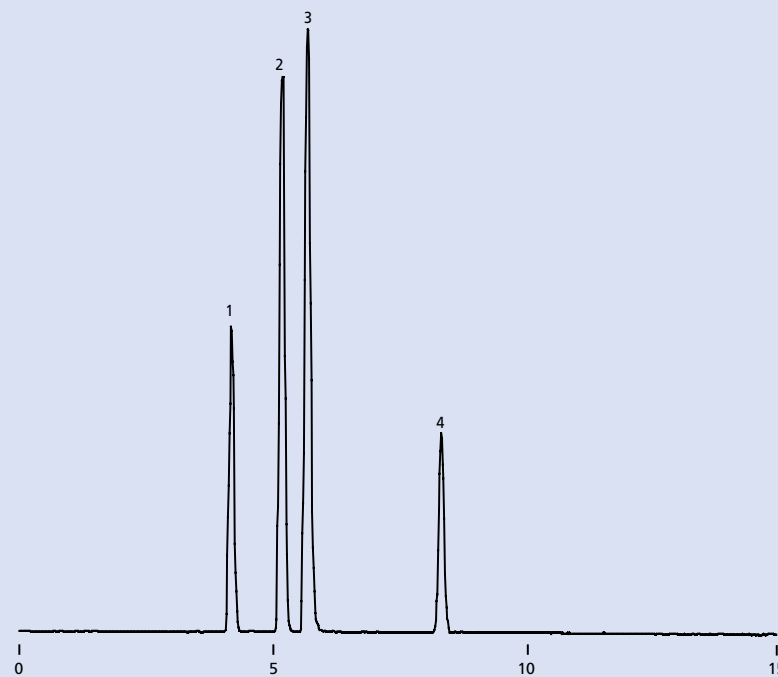
Key Benefits of Ascentis Express

- Higher peak capacities than traditional columns
- Lower backpressure than sub-2 µm columns
- 90 angstrom pore size for peptides and digests (3000 amu or less)

Figure 1. Tryptic Peptide Test Mix on Ascentis Express C18

column: Ascentis Express C18, 5 cm x 300 µm I.D. (53992-U)
 mobile phase A: 5:95, acetonitrile:water with 0.1% formic acid
 mobile phase B: 95:5, acetonitrile:water with 0.1% formic acid
 flow rate: 10 µL/min.
 det.: MS
 gradient: 5-45%B, 0-10 minutes

1. (mw 869) H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-OH
2. (mw 877) H-Tyr-Ile-Tyr-Gly-Ser-Phe-Lys-OH
3. (mw 1262) H-Ile-Ser-Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe-Arg-OH
4. (mw 1353) H-Gly-Phe-Val-Phe-Thr-Leu-Thr-Val-Pro-Ser-Glu-Arg-OH



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Ordering Information

ID (µm)	Length (cm)	C18	C8
75	5	53982-U	53983-U
100	5	53985-U	53987-U
200	5	53989-U	53991-U
300	5	53992-U	53997-U
500	5	53998-U	53999-U
75	15	54219-U	54229-U
100	15	54256-U	54260-U
200	15	54261-U	54262-U
300	15	54271-U	54272-U
500	15	54273-U	54275-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

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