

HPLC for Small Molecules

Ascentis® Express 2.7 Micron: *Do More Work in Less Time Without Changing your Method*

Do More Work in Less Time Without Changing your Method

Ascentis Express is the ideal choice for HPLC analysts interested in increasing sample throughput while maintaining or even improving resolution. By reducing solute dispersion, the unique Fused-Core technology gives Ascentis Express an advantage over conventional particles. Its low backpressure compared to sub-2 µm particles means that Ascentis Express can achieve UHPLC-like performance on conventional HPLC systems. Under UHPLC conditions, Ascentis Express can exceed the efficiency possible on sub-2 µm columns because longer columns can be used.

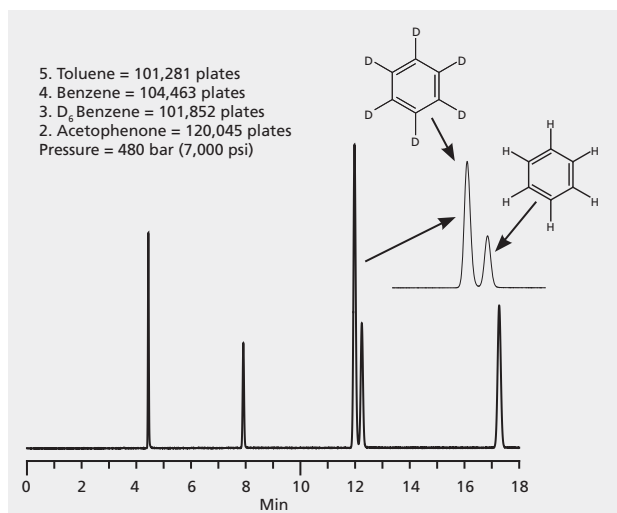
Ultra-High Resolution HPLC: Column Coupling

Column coupling in HPLC is gaining interest since LC systems are being designed to withstand column back pressures of up to 15,000 psi. Column coupling is a simple and practical way to increase resolution by simply increasing column length. Because Ascentis Express HPLC columns provide higher efficiencies at any pressure compared to 3 µm and sub-2 µm particles, the coupling of Ascentis Express columns enables significantly higher resolution than any other column on any commercial HPLC system.

HPLC Analysis of Benzene and Deuterated Benzene on Ascentis® Express C18

► application for HPLC

column Ascentis Express C18, 15 cm × 4.6 mm I.D.
 mobile phase 55:45, acetonitrile:water
 flow rate 1.0 mL/min
 column temp. 50 °C
 detector 254 nm
 injection 10 µL
 Application No. G004046



Ascentis® Express C18

Ascentis® Express C18, 2.7 Micron HPLC Column

Ascentis Express HPLC columns, through the use of Fused-Core® particle technology, can provide you with both the high speed and high efficiencies of sub-2 µm particles while maintaining lower backpressures. The combination of high efficiency and low backpressure benefits UPLC® (or other ultra high pressure system) users, as well as conventional HPLC users. Visit the Ascentis Express home page for more information on this new column technology.

Watch a 5-minute presentation that explains how Ascentis Express columns can help Maximize Sample Throughput.

suitable for L1 per USP

particle platform Fused-Core
 metals <5 ppm
 endcapped Yes
 pore size 90 Å
 operating pH 2 - 9
 temp. range 60 °C

Ref: 1. Ethan R. Badman, Richard L. Beardsley, Zhenmin Liang, Surendra Bansal, Accelerating high quality bioanalytical LC/MS/MS assays using fused core columns *J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci.* **878**, 2307-2313 (2010)

2. Ahmed Abraham, Mohammad Al-Sayah, Peter Skrdla, Yuri Berezniiski, Yadan Chen, Najjun Wu, Practical comparison of 2.7 µm fused-core silica particles and porous sub-2 µm particles for fast separations in pharmaceutical process development *J. Pharm. Biomed. Anal.* **51**, 131-137 (2010)

I.D. (mm)	L (cm)	Cat. No.	Qty
particle size 2.7 µm			
2.1	2	53799-U	1 ea
2.1	3	53802-U	1 ea
2.1	7.5	53804-U	1 ea
2.1	5	53822-U	1 ea
2.1	10	53823-U	1 ea
2.1	15	53825-U	1 ea
3.0	3	53805-U	1 ea
3.0	5	53811-U	1 ea
3.0	7.5	53812-U	1 ea
3.0	10	53814-U	1 ea
3.0	15	53816-U	1 ea
4.6	3	53818-U	1 ea
4.6	5	53826-U	1 ea
4.6	7.5	53819-U	1 ea
4.6	10	53827-U	1 ea
4.6	15	53829-U	1 ea
1.0	5	582711-U	1 ea
10	15	53793-U	1 ea

Ascentis® Express C18, 2.7 Micron Validation Pack

An Ascentis Express C18 Validation Pack makes it easy to demonstrate method reproducibility on 3 different lots. The validation pack contains a kit with 3 columns - 1 from each of 3 lots of bonded phase. And with Ascentis Express columns, you can be assured that all three columns will meet your expectations.