

Save Acetonitrile with Ascentis Express HPLC Columns

The increased efficiency of the Fused Core™ particle in the Ascentis Express HPLC columns enables you to use shorter columns on any HPLC system.

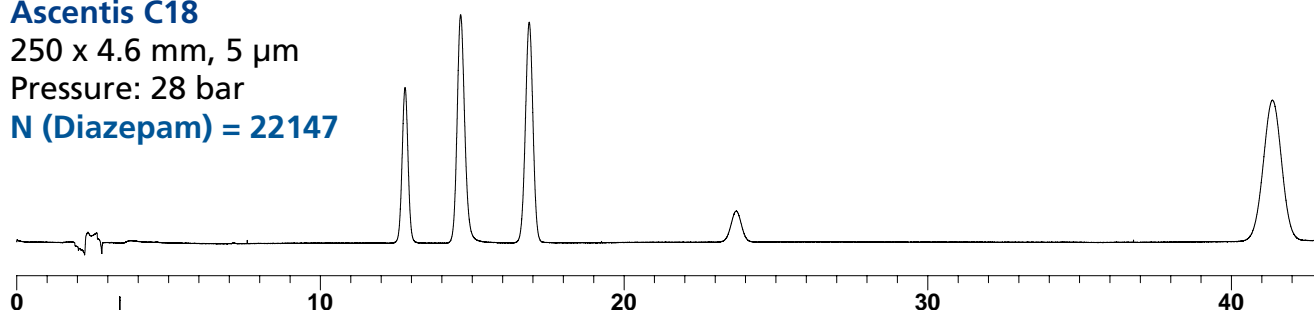
- **60% shorter HPLC columns** with same separation performance compared with **5 µm particles**
- **50% shorter HPLC columns** with same separation performance compared with **3 µm particles**

Ascentis C18

250 x 4.6 mm, 5 µm

Pressure: 28 bar

N (Diazepam) = 22147

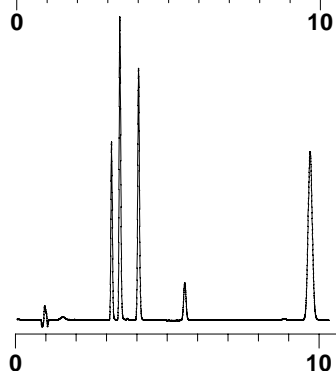


Ascentis Express C18

100 x 4.6 mm, 2.7 µm

Pressure: 67 bar

N (Diazepam) = 22694



Sample:

Oxazepam

Alprazolam

Clonazepam

N-Desmethyldiazepam

Instrument: Agilent 1100

Mob. Phase: 35:65 Acetonitrile/H₂O

Detection: 254 nm

Injection: 10 µm

Temperature: RT

| Column | Dimension | Flow Rate | Assay Time | Acetonitrile used | Acetonitrile saved |
|------------------------------|--------------|-------------|------------|-------------------|--------------------|
| Ascentis C18, 5 µm | 250 x 4,6 mm | 1 ml/min | 43 min | 15 ml | |
| Ascentis Express C18, 2,7 µm | 100 x 4,6 mm | 1 ml/min | 10 min | 3,5 ml | 77% |
| Ascentis Express C18, 2,7 µm | 100 x 3,0 mm | 0,43 ml/min | 10 min | 1,5 ml | 90% |

Save solvent now by changing your current HPLC column to Ascentis Express!

Ordering Information

Analytical

| ID (mm) | Length (cm) | Ascentis Express C18 | Ascentis Express C8 | Ascentis Express RP-Amide | Ascentis Express HILIC |
|---------|-------------|----------------------|---------------------|---------------------------|------------------------|
| 2.1 | 3 | 53802-U | 53839-U | 53910-U | 53933-U |
| 2.1 | 5 | 53822-U | 53831-U | 53911-U | 53934-U |
| 2.1 | 7.5 | 53804-U | 53843-U | 53912-U | 53938-U |
| 2.1 | 10 | 53823-U | 53832-U | 53913-U | 53939-U |
| 2.1 | 15 | 53825-U | 53834-U | 53914-U | 53946-U |
| 3.0 | 3 | 53805-U | 53844-U | 53915-U | 53964-U |
| 3.0 | 5 | 53811-U | 53848-U | 53916-U | 53967-U |
| 3.0 | 7.5 | 53812-U | 53849-U | 53917-U | 53969-U |
| 3.0 | 10 | 53814-U | 53852-U | 53918-U | 53970-U |
| 3.0 | 15 | 53816-U | 53853-U | 53919-U | 53972-U |
| 4.6 | 3 | 53818-U | 53857-U | 53921-U | 53974-U |
| 4.6 | 5 | 53826-U | 53836-U | 53922-U | 53975-U |
| 4.6 | 7.5 | 53819-U | 53858-U | 53923-U | 53977-U |
| 4.6 | 10 | 53827-U | 53837-U | 53929-U | 53979-U |
| 4.6 | 15 | 53829-U | 53838-U | 53931-U | 53981-U |

Capillary

| | Ascentis Express C18 Length | | Ascentis Express C8 Length | |
|-------------|-----------------------------|---------|----------------------------|---------|
| | 5 cm | 15 cm | 5 cm | 15 cm |
| 75 µm I.D. | 53982-U | 54219-U | 53983-U | 54229-U |
| 100 µm I.D. | 53985-U | 54256-U | 53987-U | 54260-U |
| 200 µm I.D. | 53989-U | 54261-U | 53991-U | 54262-U |
| 300 µm I.D. | 53992-U | 54271-U | 53997-U | 54272-U |
| 500 µm I.D. | 53998-U | 54273-U | 53999-U | 54275-U |

Ascentis Express Properties

Stationary Phase Support

- Ultra-pure, Type B silica
- 1.7 µm solid core particle with 0.5 µm porous silica shell (effective 2.7 µm)
- 150 m²/gram surface area (comparable to ~225 m²/g porous particle)
- 90 Å pore size

Bonded Phase

| | Coverage µmoles/m | pH Range | Endcapping |
|-----------------|-------------------|----------|------------|
| C18 | 3.5 | 2-9 | Yes |
| C8 | 3.7 | 2-9 | Yes |
| RP-Amide | 3.0 | 2-9 | Yes |
| HILIC | n/a | 2-8 | No |