



HPLC COLUMN - IMTAKT

High Throughput / Ultra High Pressure Column

High Throughput

Ultra High Pressure

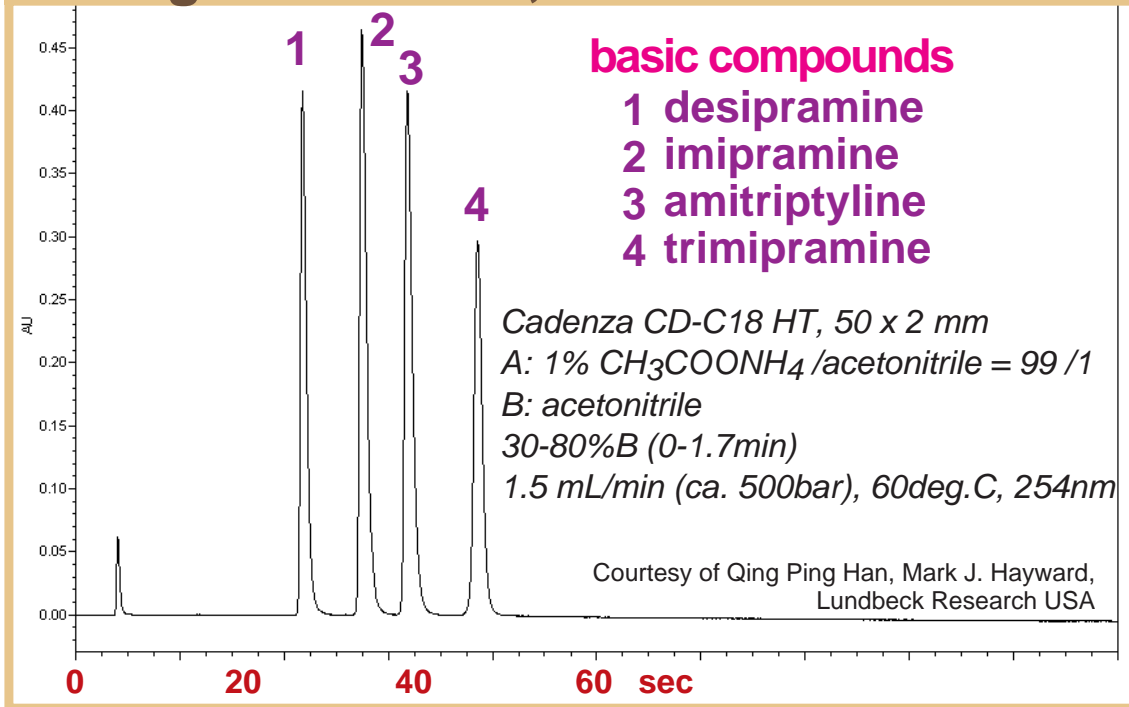
3µm

Porous pure silica

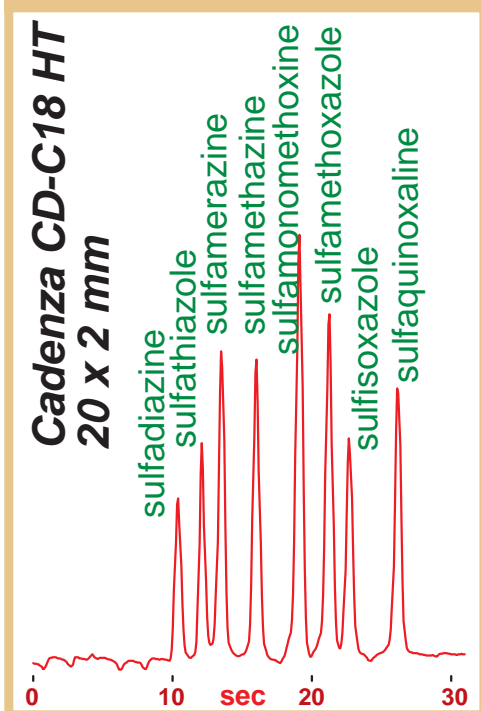
HT(500bar,50MPa) / UP(1000bar,100MPa) Version

High Throughput + High Resolution Separation for UHPLC

High Flow Rate, Faster Run Time



Short Void Time



- Faster separation with 3µm
- 500 bar (HT) and 1000 bar (UP) types
- Various phases with RP and NP mode
- Various I.D. (HT: 1 /1.5 /2 /3 /4.6 mm)
- <1 minute run times with shorter columns
- High speed and performance with 250mm

Sub-2µm columns are not the only columns applicable for UHPLC. Since 3µm columns operate under half of the pressure than 2µm columns, 3µm can offer improved analytical speed with a high flow rate. Moreover, a long column high pressure 3µm column can be more effective for high resolution and fast separation.

HT/UP columns include the popular Cadenza CD-C18, Unison UK-C18, and other RP (C8, phenyl) and NP (Silica, Amino) packings. Another advantage of Imtakt HT/UP columns is that many different column dimensions are available.

🎵 Various stationary phases and column dimensions

We offer the following two kinds of versions with 3µm particles - HT (50 MPa) / UP (100 MPa)

● 500 bar High throughput (HT) version with 3µm particles

Product Name	Max. Pressure	Features
Cadenza CD-C18 HT	500 bar (50MPa)	12nm pore size. High density ODS, superior molecular recognition. Useful for multiple peak separation or isomers.
Cadenza CL-C18 HT		Same silica and ODS density as CD-C18. Silanol amount controlled. A little different selectivity from CD-C18.
Unison UK-C18 HT		13nm pore size. Middle ODS density covering between 100% aqueous and organic condition. Wide range RP separation.
Unison UK-C8 HT		13nm pore size. Acid durability has been improved. Excellent peak shape for basic compounds.
Unison UK-Phenyl HT		13nm pore size. Acid durability has been improved. Excellent peak shape for chelating compounds.
Unison UK-Silica HT		13nm pore size. Both aqueous / non-aqueous normal phase separation. High resolution with 3µm and 250mm length.
Unison UK-Amino HT		Amazing water durability. Not only saccharide separation, but also aqueous / non aqueous separation is available.

HT Column Dimension Availability

1 mm I.D.	1.5 mm I.D.	2 mm I.D.	3 mm I.D.	4.6 mm I.D.
-	-	10 x 2 mm	10 x 3 mm	10 x 4.6 mm
-	-	20 x 2 mm	20 x 3 mm	20 x 4.6 mm
30 x 1 mm	30 x 1.5 mm	30 x 2 mm	30 x 3 mm	30 x 4.6 mm
50 x 1 mm	50 x 1.5 mm	50 x 2 mm	50 x 3 mm	50 x 4.6 mm
75 x 1 mm	75 x 1.5 mm	75 x 2 mm	75 x 3 mm	75 x 4.6 mm
100 x 1 mm	100 x 1.5 mm	100 x 2 mm	100 x 3 mm	100 x 4.6 mm
150 x 1 mm	150 x 1.5 mm	150 x 2 mm	150 x 3 mm	150 x 4.6 mm
250 x 1 mm	250 x 1.5 mm	250 x 2 mm	250 x 3 mm	250 x 4.6 mm

3µm

● 1000 bar Ultra high pressure (UP) version with 3µm particles

Product Name	Max Pressure	UP Column Dimension Availability
Cadenza CD-C18 UP	1000 bar (100MPa)	30 x 2 mm 50 x 2 mm 75 x 2 mm 100 x 2 mm 150 x 2 mm 250 x 2 mm
Cadenza CL-C18 UP		
Unison UK-C18 UP		
Unison UK-C8 UP		
Unison UK-Phenyl UP		
Unison UK-Silica UP		
Unison UK-Amino UP		

