

Ascentis[®] ES Cyano HPLC Columns

Key Benefits

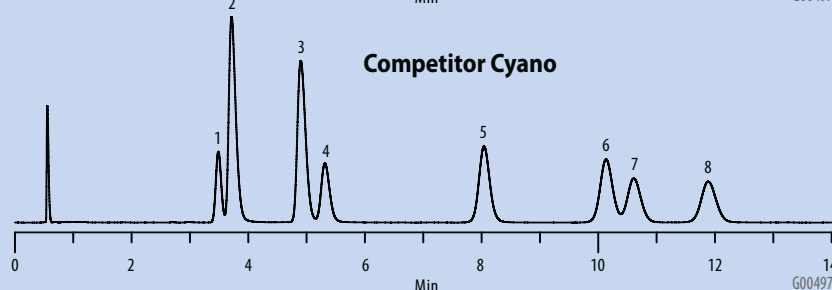
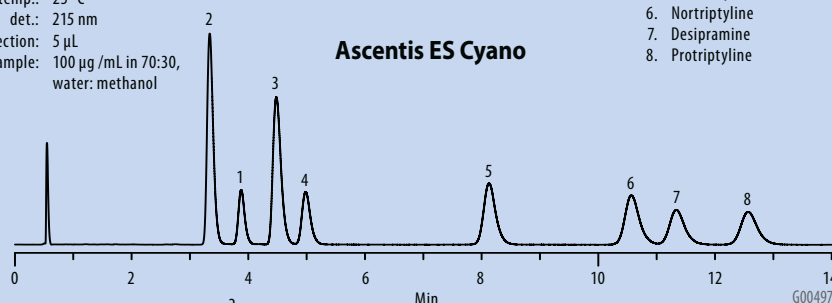
- Extra stable for low pH mobile phases due to sterically protected phase
- Improved retention compared to other cyano phases
- Endcapped for better peak shape at neutral pH

Cyano columns have been used for the analysis of Tricyclic Antidepressants for some time. A comparison of the most popular competitor column and the Ascentis ES Cyano phase is shown below. Better resolution is seen using the Ascentis ES Cyano than the competitor column for three critical peak pairs. In addition, note the selectivity change of the trimipramine and doxepin (peaks 1 and 2) between these two phases under these conditions

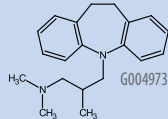
Tricyclic Antidepressants on Ascentis ES Cyano and a Competitor Cyano Phase

column: as indicated; 15 cm x 4.6 mm, 5 μ m particle
 mobile phase A: 10 mM potassium phosphate, dibasic (pH 7.0 with phosphoric acid)
 mobile phase B: acetonitrile
 mobile phase C: methanol
 mixing proportions: A:B:C, 25:60:15
 flow rate: 2.0 mL/min
 temp.: 25 $^{\circ}$ C
 det.: 215 nm
 injection: 5 μ L
 sample: 100 μ g/mL in 70:30, water: methanol

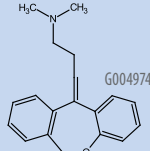
1. Trimipramine
2. Doxepin
3. Amitriptyline
4. Imipramine
5. Nordoxepin
6. Nortriptyline
7. Desipramine
8. Protriptyline



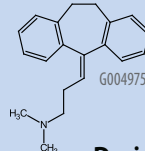
Trimipramine



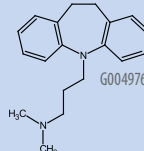
Doxepin



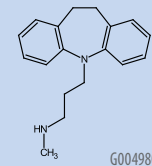
Amitriptylin



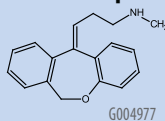
Imipramine



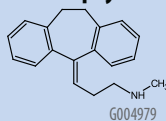
Desipramine



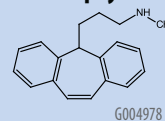
Nordoxepin



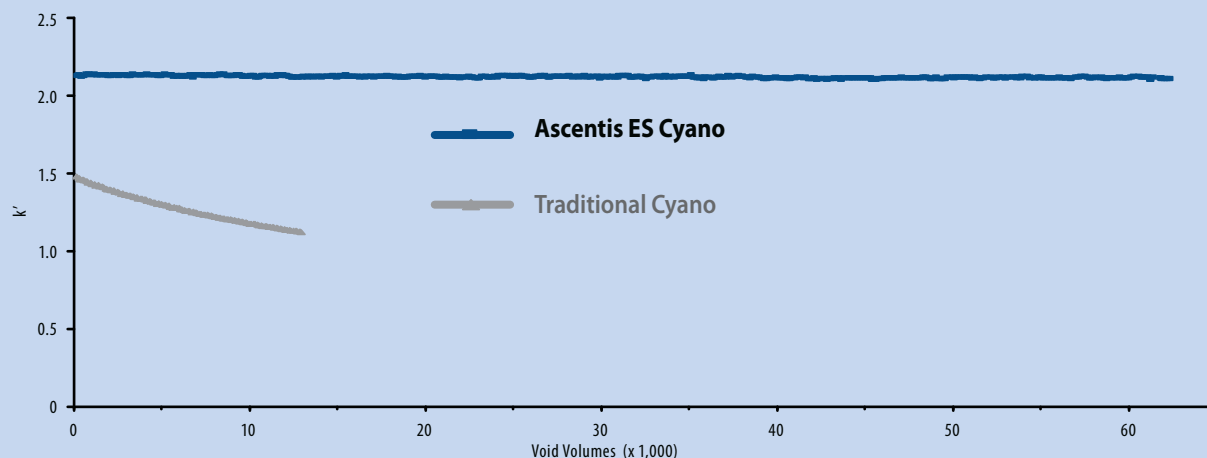
Nortriptyline



Protriptyline



Extended Stability of Ascentis ES Cyano Compared to Traditional Cyano Columns using Acidic Mobile Phases



G004981

Ascentis ES Cyano HPLC Columns

	Length (cm)	ID (mm)	Cat. No.
3 μm			
	5	2.1	577308-U
	10	2.1	577309-U
	15	2.1	577310-U
	5	4.6	577311-U
	10	4.6	577312-U

	Length (cm)	ID (mm)	Cat. No.
5 μm			
	5	2.1	577300-U
	10	2.1	577301-U
	15	2.1	577303-U
	5	4.6	577304-U
	10	4.6	577305-U
	15	4.6	577306-U
	25	4.6	577307-U

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