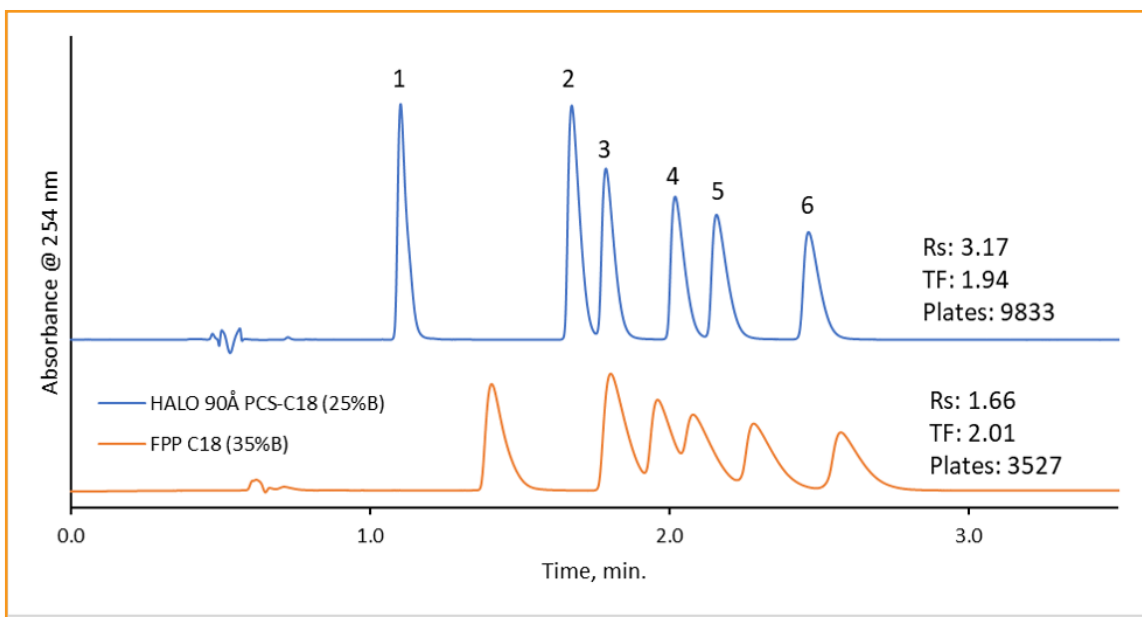




Separation of Antidepressants Comparing a Charged Alkyl Stationary Phase to an Uncharged Alkyl Phase

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TEST CONDITIONS:

Column: HALO 90 Å PCS C18, 2.7 μm, 2.1 x 100 mm

Part Number: 92812-617

Competitor Column: FPP C18, 3 μm, 2.1 x 100 mm

Mobile Phase A: Water, 0.1% Formic Acid

Mobile Phase B: Acetonitrile, 0.1% Formic Acid

Isocratic: HALO[®] PCS C18: 25 %B

FPP C18: 35 %B

Flow Rate: 0.4 mL/min

Back Pressure: 267 bar

Temperature: 35 °C

Injection: 0.5 μL (40 μg)

Sample Solvent: 75/25 Water/ ACN

Wavelength: PDA, 254 nm

Flow Cell: 1 μL

Data Rate: 100 Hz

Response Time: 0.025 sec.

LC System: Shimadzu Nexera X2

PEAK IDENTITIES

1. Doxepin
2. Desipramine
3. Imipramine
4. Nortriptyline
5. Amitriptyline
6. Trimipramine

Tricyclic antidepressants (TCAs) are a class of drugs primarily used to manage depression. A separation of antidepressants is achieved using the HALO 90 Å PCS C18 column. The positive charged surface (PCS) stationary phase is ideal for basic analytes when using low ionic strength mobile phases such as formic acid. Sample loading is also improved compared to more traditional C18 columns on the market.

