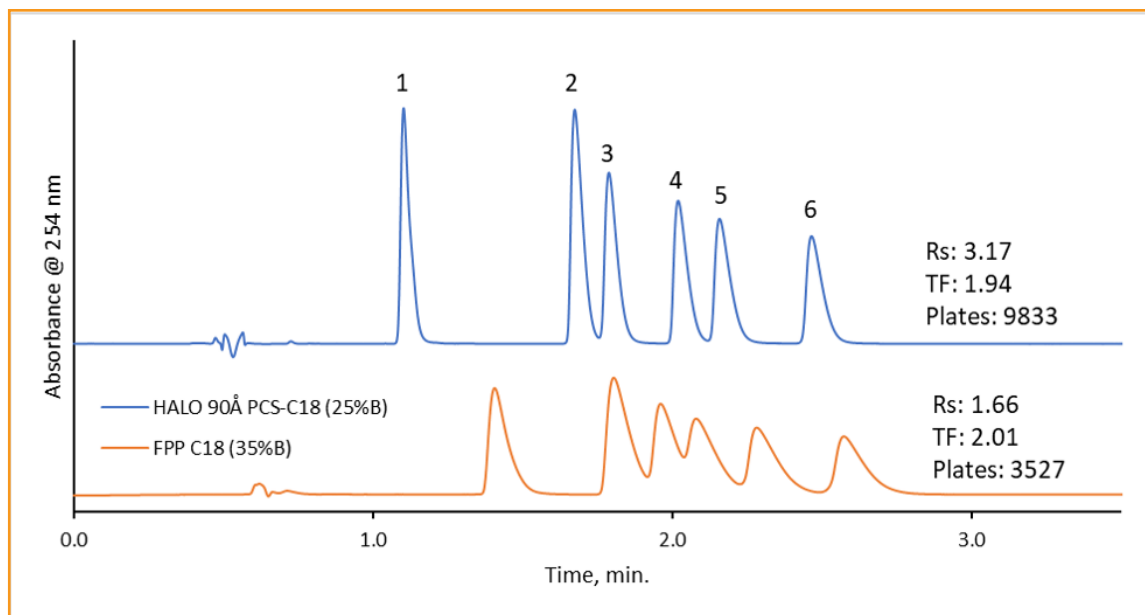




## Separation of Antidepressants Using HALO 90 Å PCS C18

339



### TEST CONDITIONS:

**Column:** HALO 90 Å PCS C18, 2.7  $\mu$ m, 2.1 x 100 mm

**Part Number:** 92812-617

**Competitor Column:** FPP C18, 3  $\mu$ m, 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  $\mu$ L (40  $\mu$ g)

**Sample Solvent:** 75/25 Water/ ACN

**Wavelength:** PDA, 254 nm

**Flow Cell:** 1  $\mu$ L

**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.

