Anticonvulsant drugs

Application Note

BioPharma

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Introduction
Gas chromatography with custom-made, packed Agilent CP-Sil 34, separates ten anticonvulsant drugs in serum in 15 minutes.
Conditions

Technique: GC-packed

Column: Agilent CP-Sil 34, 2 mm x 1/4 in x 3 ft glass, 3%
CP-Sil 34, Chromosorb GHP 100/120 (Custom made)

Temperature: 150 °C → 275 °C, 10 °C/min

Carrier Gas: N₂, 60 mL/min

Detector: FID, 256 x 10, 64 x 10 Afs

Peak identification

A. standard mixture
1. EMS: 1.55 μg
2. MPS: 1.2 (int. std.)
3. NDMS: 0.42
4. PROP: 0.44
5. PEMA: 0.42
6. PB: 1.13
7. CARB: 0.23
8. PRIM: 0.35
9. DHP: 0.53
10. MPPH: 0.60 (int. std.)

B. spiked serum sample
1. EMS: 0.71 μg
2. MPS: 0.60
6. PB: 0.41
7. CARB: 0.07
8. PRIM: 0.11
9. DHP: 0.17
10. MPPH: 0.30