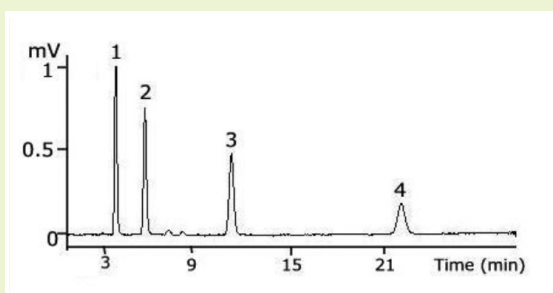
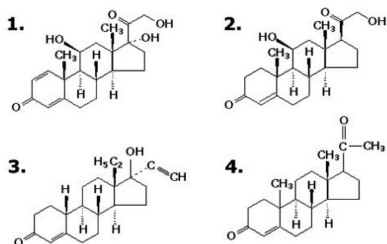


Separation of Hormones

With Cogent Bidentate C18 Capillary LC Column



Method Conditions

Column: Cogent Bidentate C18™ Capillary LC Column, 4µm, 100Å

Catalog No.: 40018-A-50

Dimensions: 50µm i.d. x 40 cm packed (50 cm total length)

Mobile Phase: 70% Acetonitrile/ 30% DI H₂O/ 0.1% formic acid

Injection vol.: 10nL

Flow rate: 100 nL/min

Detection: UV 254 nm

Instrument: Trisep™ - 2100 ePLC system, Unimicro Tech. Inc.

Peaks: 1. Prednisolone
 2. Corticosterone
 3. Norgestel
 4. Progesterone (100 mg/mL of each in acetonitrile + DI H₂O)

Discussion

The chromatogram presented was done in Capillary LC and shows the separation of mixture of four steroids. The peak shape of each compound is excellent (As < 1.1 for all solutes) using an isocratic mobile phase. The Signal to Noise ratio is excellent, due to a high-order digital filter used in the detector. Small peaks of impurities and degradation products of hormones tested are visible.

The instrument is a valuable addition to any analytical laboratory.

Notes: The instrument can be used in three main different modes: CEC (Capillary Electrochromatography), Capillary LC and CE (Capillary Electrophoresis). In addition it can be used to perform pressure assisted CEC or voltage assisted ePLC and many other combinations of the micro separation techniques.