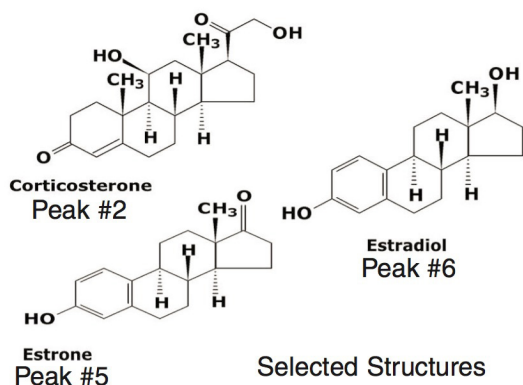
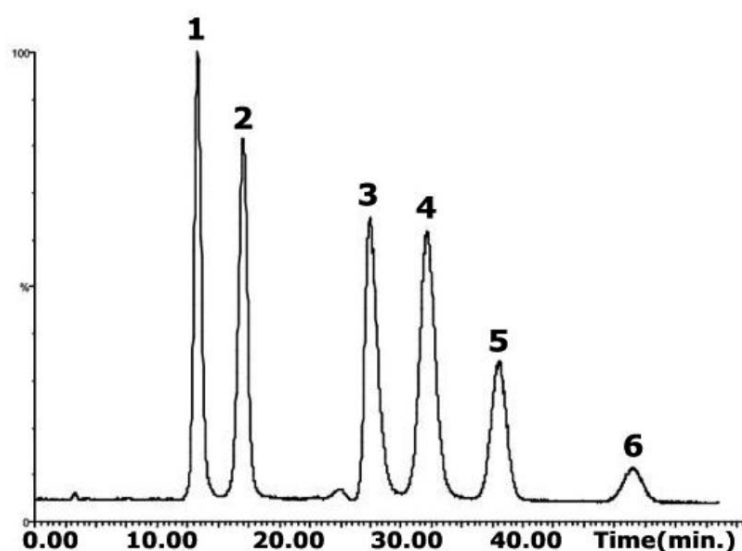


## Corticosterones Analyzed with LCMS – AppNote

### Serum Corticosterones Concentration Determinations

Serum Corticosterone Concentrations are of clinical significance in Adrenal dysfunction. Its measurement is sometimes used to diagnose apparent mineral Corticoid Excess Syndrome. It can also be used as a bio marker of malignancy in Adrenal Tumors.

Using this Method allows the simultaneous measurement of the two main Estrogen fractions, Estrone and Estradiol in Breast Tumor tissue. Highly sensitive assays for measuring the compounds at low levels of Estrogen in postmenopausal women, and monitoring Estrogen levels in women receiving hormone replacement therapy, can also be developed using the method presented here.



### Peaks:

Parent Ion /mz

1. Andrenosterone 301 283 (MH+ - H<sub>2</sub>O)
2. Corticosterone 347 329 (MH+ - H<sub>2</sub>O)
3. 4-Androstene-3,17-dione 287 319 (MH+ O<sub>2</sub>)

4. 11-Alpha-Acetoxyprogesterone 373 313(MH+ -H<sub>2</sub>CHOH)

5. Estrone 271 253 (MH+ -H<sub>2</sub>O)

6. Estradiol 273 254 (MH+ -H<sub>2</sub>O)

## Method Conditions:

**Column:** Cogent UDC Cholesterol™, 4μm, 100Å

**Catalog No.:** 69069-7.5P

**Dimensions:** 4.6 x 75mm

**Mobile Phase:** 50:50 DI Water / Methanol / 0.5% Formic Acid

**Injection vol.:** 5μL

**Flow rate:** 0.5ml / minute

**Detection:** APCI, Single Ion Monitoring Mass Spectrometer

**Notes:** The total ion chromatogram of a mixture of six Steroids presented, shows the resolving power of the Cogent UDC Cholesterol Column. The peak shapes are excellent (As < 1.1 for all solutes) using an isocratic Mobile Phase.



## Attachment

No 35 Corticosterones Analyzed with LCMS pdf 0.2 Mb [Download File](#)

Printed from the Chrom Resource Center

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

Date: 02-05-2024