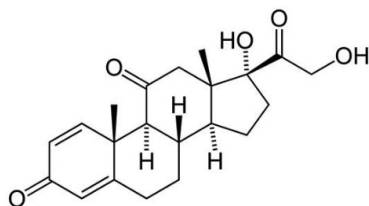
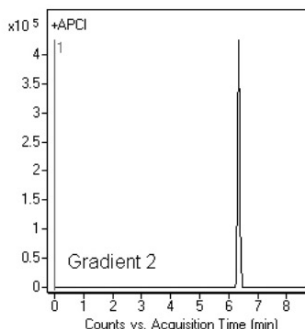
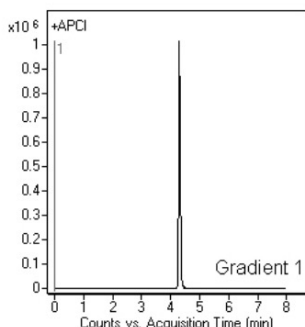


# Quantitation of Prednisone

Simple and Easy by LCMS



Prednisone



**Note:** The administration of prednisone, a synthetic analog of cortisone, suppresses production of cortisol and monitoring the concentration of this corticosteroid has significant therapeutic and clinical importance. Prednisone and prednisolone were introduced by Schering Corporation in the mid-1960s under the brand names Meticorten® and Meticortelone®, respectively. These prescription medicines are now available from a number of manufacturers as generic drugs.

## Method Conditions

**Column:** Cogent Bidentate C18™, 4µm, 100Å

**Catalog No.:** 40018-05P-2

**Dimensions:** 2.1 x 50 mm

**Solvents:** A: DI H<sub>2</sub>O + 0.1% formic acid

B: Methanol + 0.1% formic acid

**Gradient 1:**

time (min.)	%B
0	10
5	100
7	100
8	10

**Gradient 2:**

time (min.)	%B
0	10
10	100
11	100
12	10

**Post Time:** 5 min

**Total Time:** 12 min

**Injection vol.:** 1µL

**Flow rate:** 0.4 mL/min

**Detection:** APCI — POS - Agilent 6210 MSD TOF mass spectrometer

**Sample:** Prednisone 359.1853 m/z (M+H)<sup>+</sup> (100 ng/mL prepared in 100% B and diluted 1:10 before analysis)

## Discussion

The LC/MS method in this note does not need any type of derivatization and has therefore offers a great advantage over other HPLC methods. Two types are gradients are presented which will allow you to choose one depending on other components in the sample and your method objectives. Retention can be achieved on a very short column (50 mm) as shown.

Linear gradient conditions were used for analysis of this important corticosteroid. All TYPE-C Cogent™ columns equilibrate very rapidly to initial conditions when gradient analysis is used.