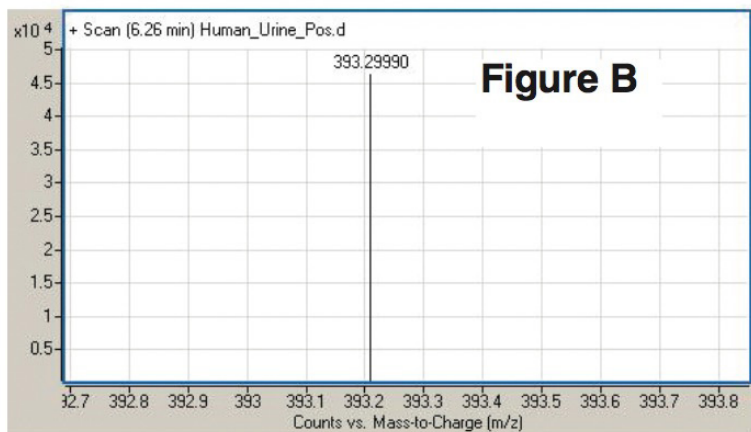
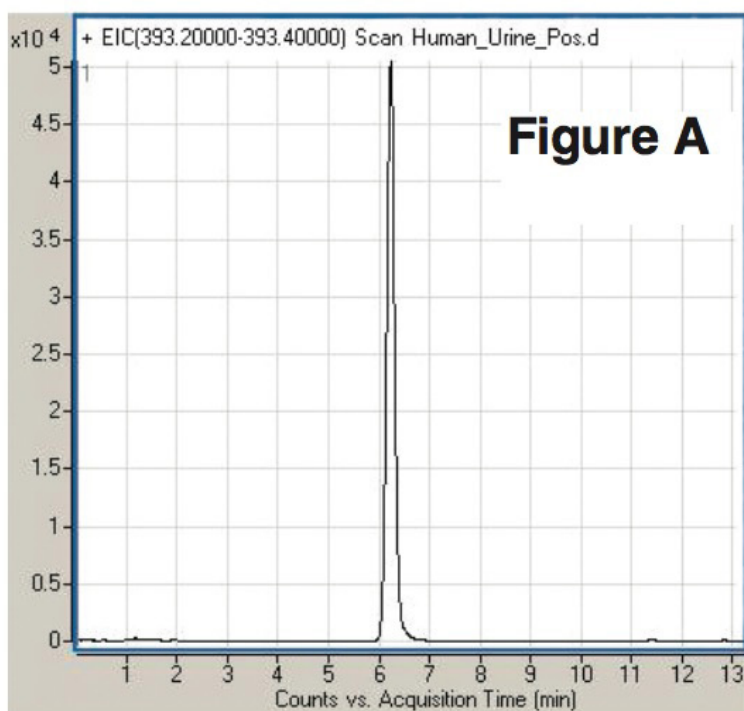


Chenodeoxycholic Acid in Urine Analyzed with LCMS – AppNote

Chenodeoxycholic Acid (CDCA) Separation in LCMS

The presence of an important bile acid, Chenodeoxycholic Acid, in human urine was detected using a simple Mobile Phase with the Method below. In addition to being simple and easy, it also provides a fast Equilibration between runs even while using a Gradient, for higher throughput.



Peak:

Chenodeoxycholic Acid 393.29994 m/z (M+H)⁺, RT = 6.26 minute

Method Conditions

Column: Cogent Diamond Hydride™, 4μm, 100Å

Catalog No.: 70000-15P-2

Dimensions: 2.1 x 150mm

Mobile Phase:

A: DI Water / 0.1% Formic Acid

B: Acetonitrile / 0.1% Formic Acid

Gradient:

Time (minutes)	%B
0	95
0.2	95
7	85
8	85
10	50
11	50
11.1	95
14	95

Flow rate: 0.4mL / minute

Detection: ESI - pos - Agilent 6210 MSD TOF Mass Spectrometer

Sample Preparation: Human urine - after simple extraction.

t₀: 1.44 minutes

Notes: Urinary levels of bile acids are expected to be a useful index of liver function. Also bile acid concentrations in urine obtained from patients with Cerebrotendinous Xanthomatosis are different from those of normal subjects and should be useful for diagnosis and may be used for routine Assays of biological fluids. In addition unique biological activities have been identified for bile acids, especially Chenodeoxycholic Acid has an effect on human ovarian cancer cell lines A2780 and A2780-CP, the last one being Cisplatin resistant. CDCA may be used in treatment of Ovarian Cancer. Synthetic bile acid derivatives are lead compounds in creation of new drugs useful for prostate cancer therapy.

**Attachment**

No 55 Chenodeoxycholic Acid in Urine 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

Website: www.mtc-usa.com

Date: 04-05-2024