

Figure S1. Identification of T- α / β / ω MCA by fragmentation profiles and RTs. (A) TIC chromatogram of m/z 514.284 in the mouse serum sample. (B) MS/MS spectra of the peak with a RT of 9.283 in the mouse serum in part A. (C) TIC chromatogram of authentic T- α MCA when fragmentation was performed at m/z 514.284. (D) MS/MS spectra of the peak, with a RT of 9.25 in panel C. (E) TIC chromatogram of authentic T- β MCA when the fragmentation was performed at m/z 514.284. (F) MS/MS spectra of the peak, with a RT of 9.32 in part E. (G) TIC chromatogram of authentic T- ω MCA when the fragmentation was performed at m/z 514.2796. (H) MS/MS spectra of the peak, with a RT of 9.21 in part G. T- α MCA, tauro- α -muricholic acid; T- β MCA, tauro- β -muricholic acid; T- ω MCA, tauro- ω -muricholic acid; TIC, total ion count; RT, retention time.

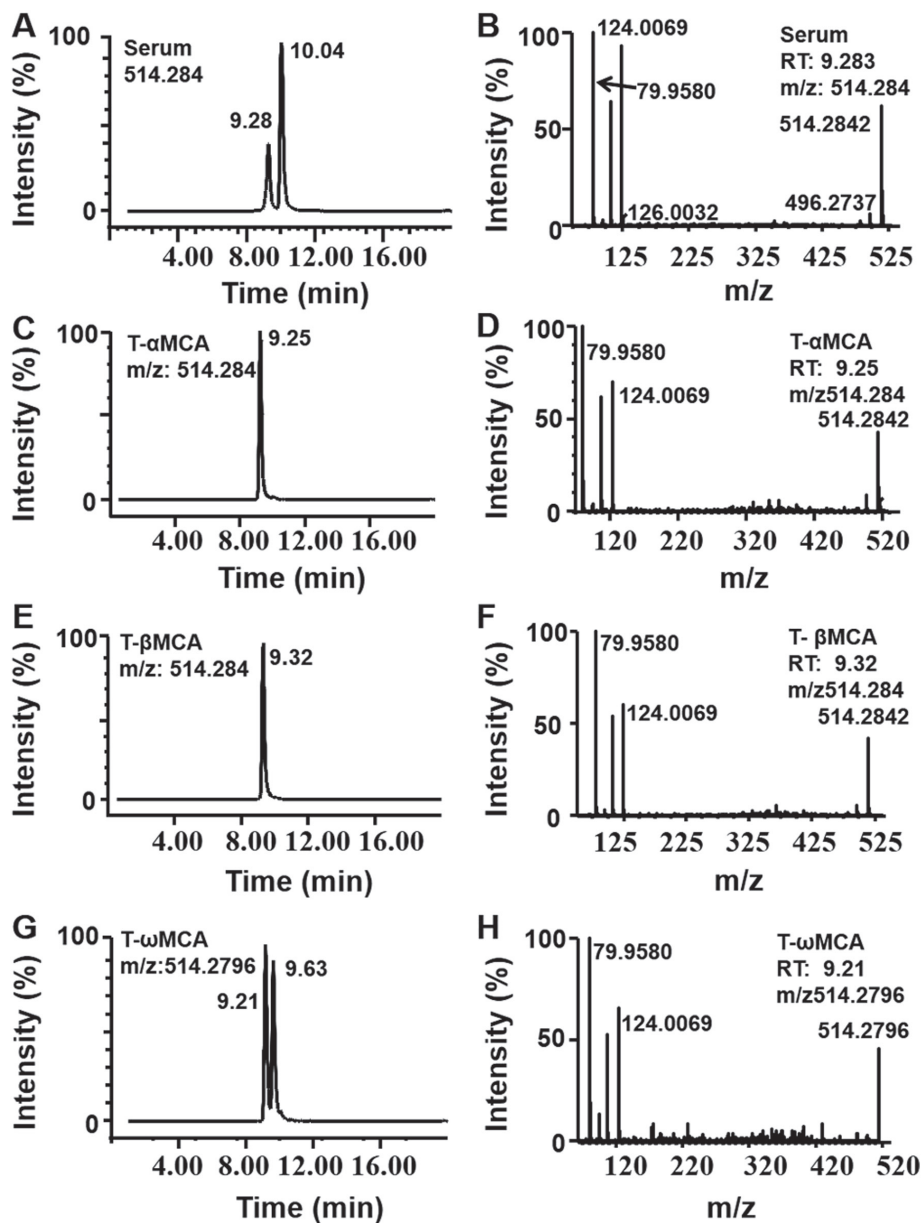


Figure S2. Identification of TCDCA by fragmentation profiles and RTs. (A) TIC chromatogram of m/z 498.278 in the mouse serum sample. (B) MS/MS spectra of the peak with a RT of 10.950 in the mouse serum in part A. (C) TIC chromatogram of authentic TCA when the fragmentation was performed at m/z 498.287. (D) MS/MS spectra of the peak, with RT 10.693 in part C. TCDCA, taurochenodeoxycholic acid; TIC, total ion count; RT, retention time.

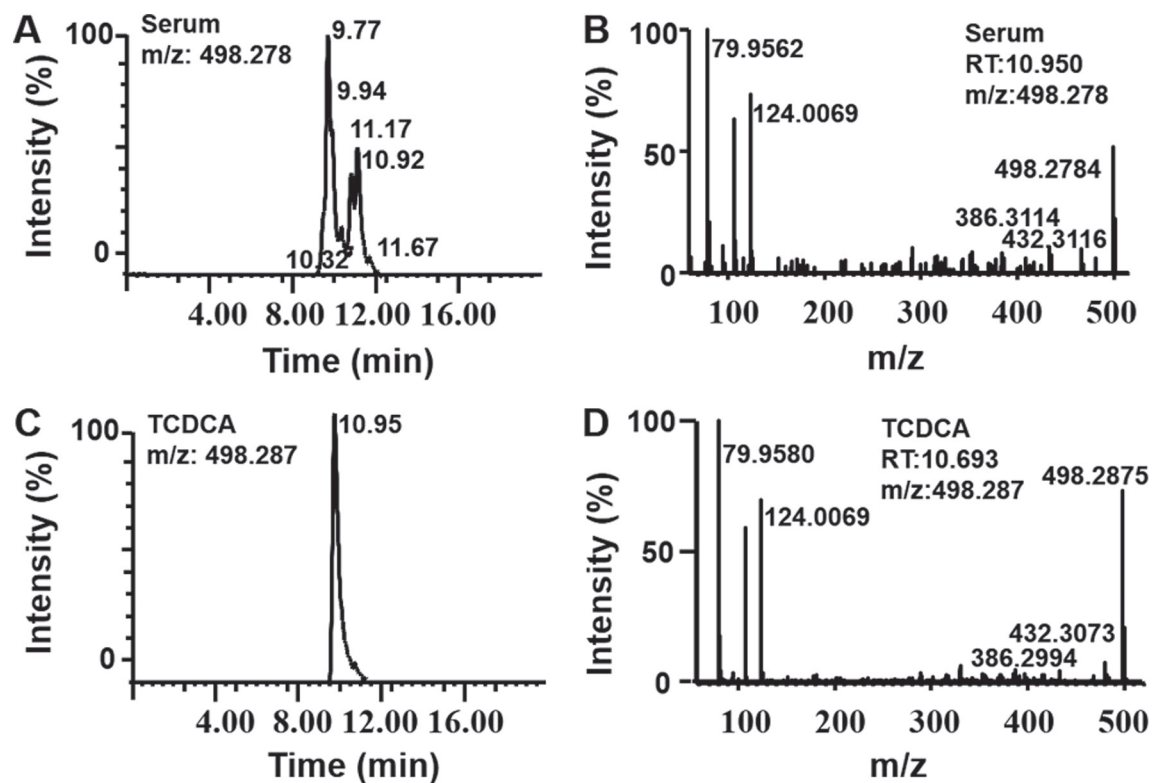


Figure S3. Identification of TUDCA by fragmentation profiles and RTs. (A) TIC chromatogram of m/z 498.288 in the mouse serum sample. (B) MS/MS spectra of the peak with a RT of 10.02 in the mouse serum in part A. (C) TIC chromatogram of authentic TCA when the fragmentation was performed at m/z 498.287. (D) MS/MS spectra of the peak, with a RT of 10.03 in part C. TUDCA, tauroursodeoxycholic acid; TIC, total ion count; RT, retention time.

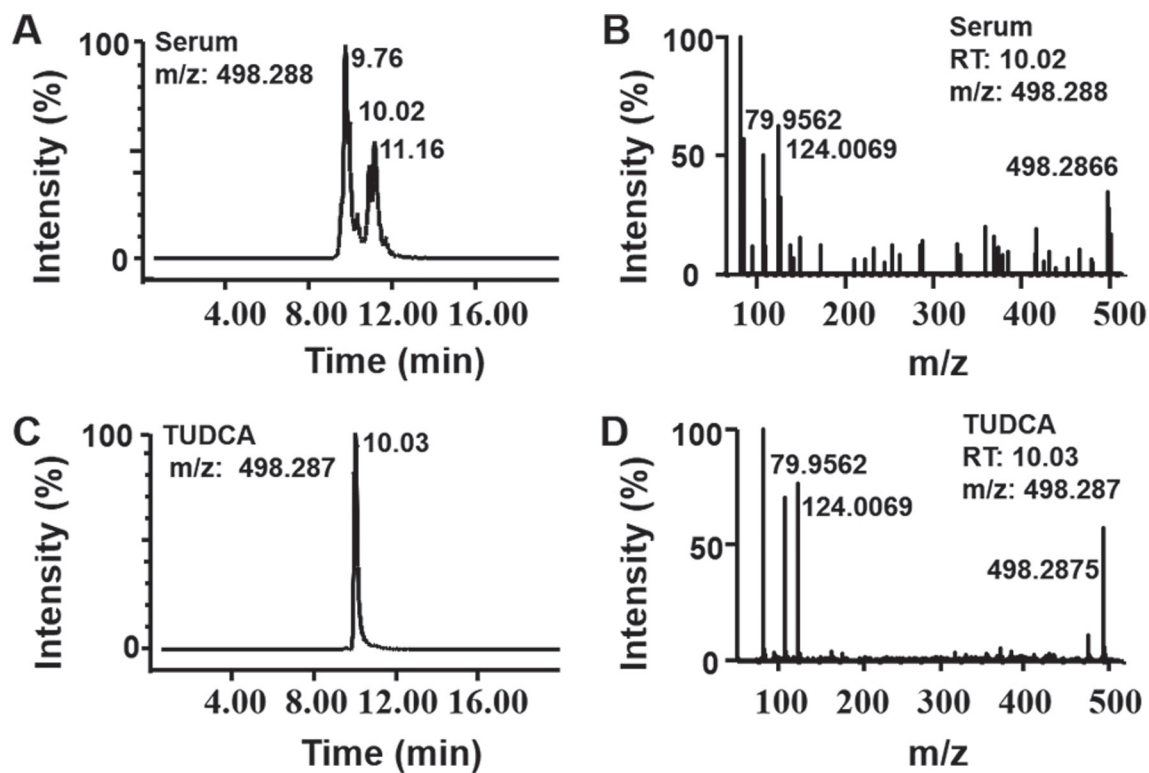


Figure S4. Identification of TDCA by fragmentation profiles and RTs. (A) TIC chromatogram of m/z 498.287 in the mouse serum sample. (B) MS/MS spectra of the peak with a RT of 11.16 in the mouse serum in part A. (C) TIC chromatogram of authentic TCA when the fragmentation was performed at m/z 489.287. (D) MS/MS spectra of the peak, with a RT of 11.18 in panel C. TDCA, taurodeoxycholic acid; TIC, total ion count; RT, retention time.

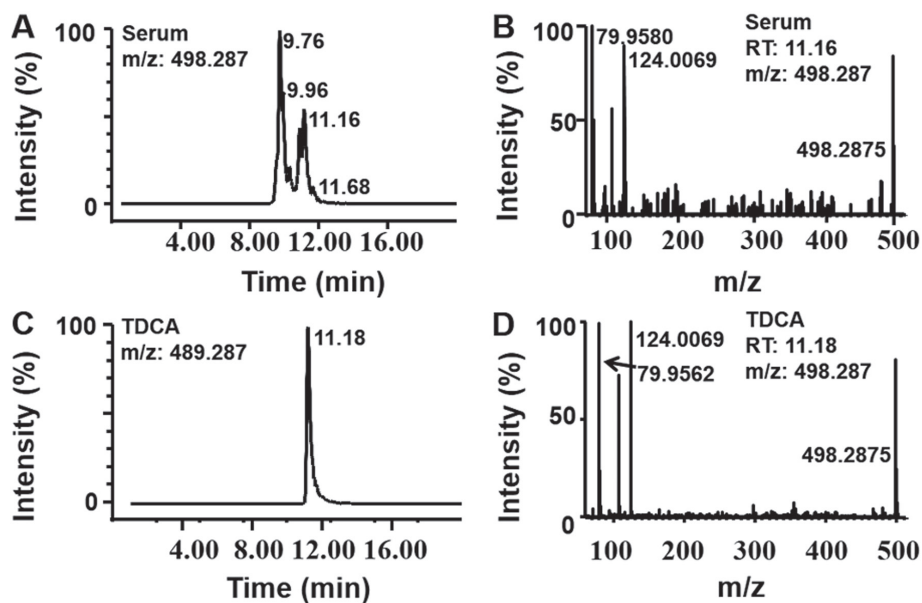


Table SI. Primer sequences used in the reverse transcription-quantitative PCR.

Gene	Primer sequence (5'→3')	Product (bp)
<i>Cholesterol 7α-hydroxylase</i>	F: GTCCGGATATTCAAGGATGC R: GGGAATGCCATTTACTTGGA	107
<i>Sterol 12α-hydroxylase</i>	F: GATAGGGGAAGAGAGCCACC R: TCCTCAGGGTGGTACAGGAG	96
<i>Multidrug resistance-related protein 4</i>	F: TTAGATGGGCCTCTGGTTCT R: GCCCACAATTCCAACCTTT	102
<i>Multidrug resistance protein 1a</i>	F: CTCTATTGGACAAAGTGCTCACTG R: CTCCTCGTGCAATTGGCGAA	104
<i>Organic solute transporter-β</i>	F: CCAGGACCAGGATGGAATAA R: AGAGAAAGCTGCAGCCAATG	110
<i>Oatp1</i>	F: TAATCGGGCCAACAATCTTC R: ACTCCCATAATGCCCTTGG	109
<i>Oatp2</i>	F: TAGCTGAATGAGAGGGCTGC R: ACCAACTCAGCATCCAAGC	103
<i>Multidrug resistance protein 2</i>	F: ACGGGCTCTTGACTTACCAC R: CTACGACCCACAGAGGGTA	105
<i>c-Fos</i>	F: TGGCACTAGAGACGGACAGA R: TCCTACTACCATTCCTCCAGC	94
<i>c-Jun</i>	F: GGGACACAGCTTTCACCCTA R: GAAAAGTAGCCCCCAACCTC	104
<i>Il10</i>	F: TGTCAAATTCATTCATGGCCT R: ATCGATTTCTCCCCTGTGAA	108
<i>Il6</i>	F: ACCAGAGGAAATTTCAATAGC R: TGATGCACTTGCAGAAAACA	109
<i>Tumor necrosis factor α</i>	F: AGGGTCTGGGCCATAGAACT R: CCACCACGCTCTTCTGTCTAC	103
<i>Fibrinogen α chain</i>	F: CAACTCTTGGGCCACGTACT R: GGGTCACCTGCCTCATCTT	108
<i>Fibrinogen β chain</i>	F: AGGAGGCTCTTCCTTTCTCC R: CAAGCTGCCGATGATGACTA	90
<i>Suppressor of cytokine signaling 3</i>	F: AACTTGCTGTGGGTGACCAT R: CGGCTACCACATCCAAGGAA	136
<i>18S ribosomal RNA</i>	F: ATTGGAGCTGGAATTACCGC R: AAGGCCGGAGATTTCGCT	102

Il, interleukin; *Oatp*, organic anion transporting polypeptide; F, forward; R, reverse.