

STRAIGHTFORWARD SYNTHESIS OF 2,2,4,4,5,7,7-d<sub>7</sub>-CHOLESTANE: A NEW DEUTERATED STANDARD IN PETROLEUM ANALYSIS

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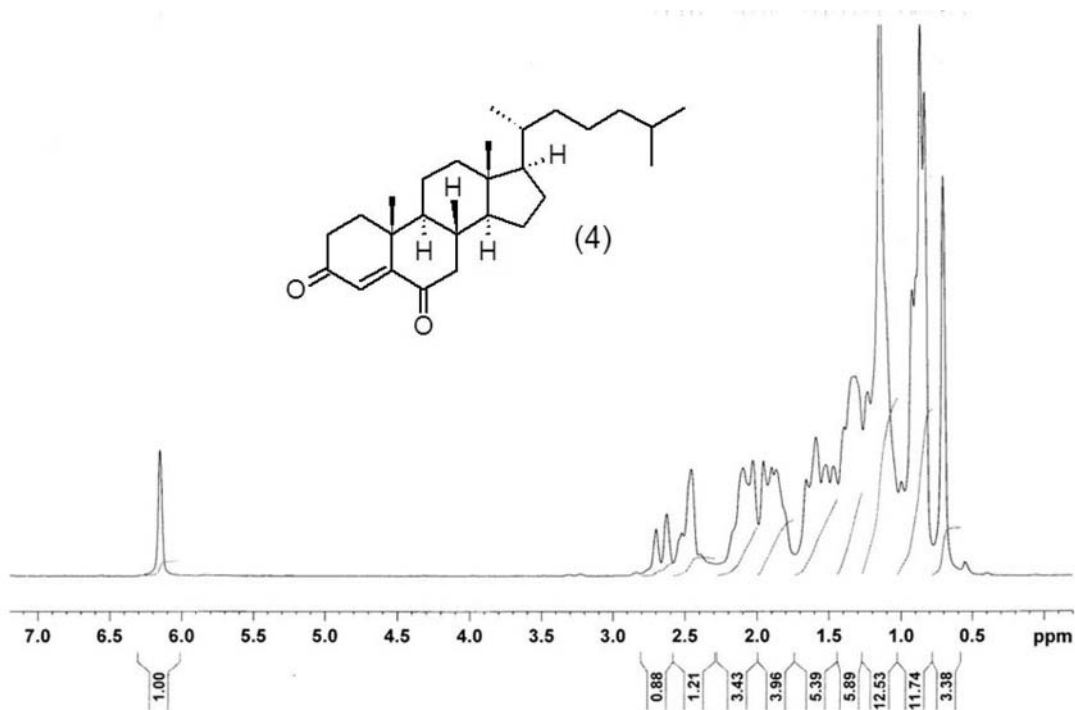


Figura 1S. <sup>1</sup>H NMR spectrum of 4-cholesten-3,6-dione (4), 200 MHz, CDCl<sub>3</sub>

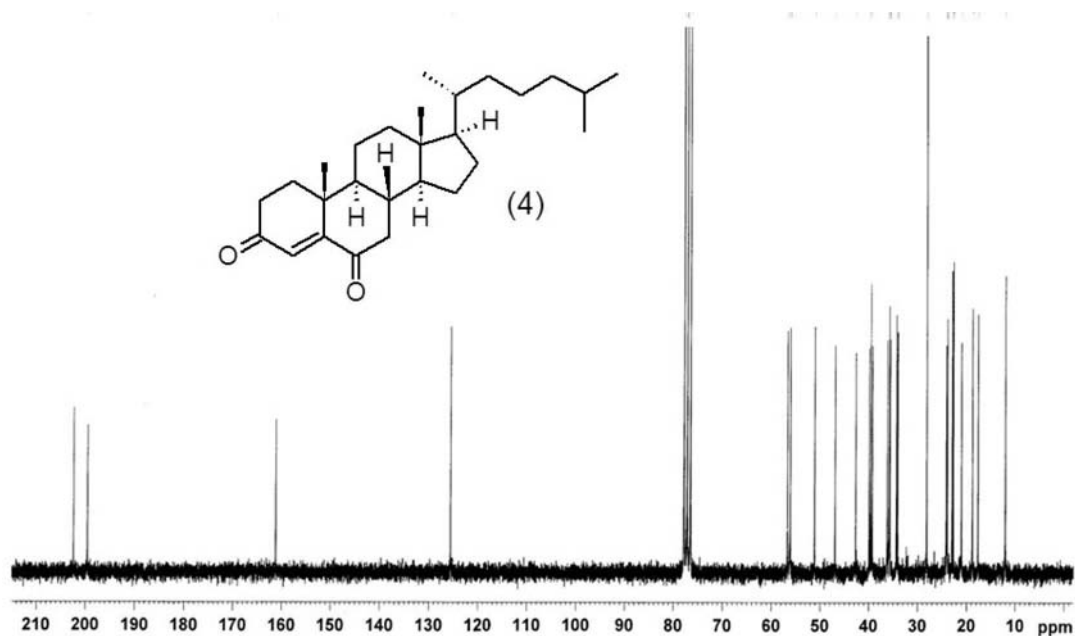


Figura 2S. <sup>13</sup>C NMR spectrum of 4-cholesten-3,6-dione (4), 50 MHz, CDCl<sub>3</sub>

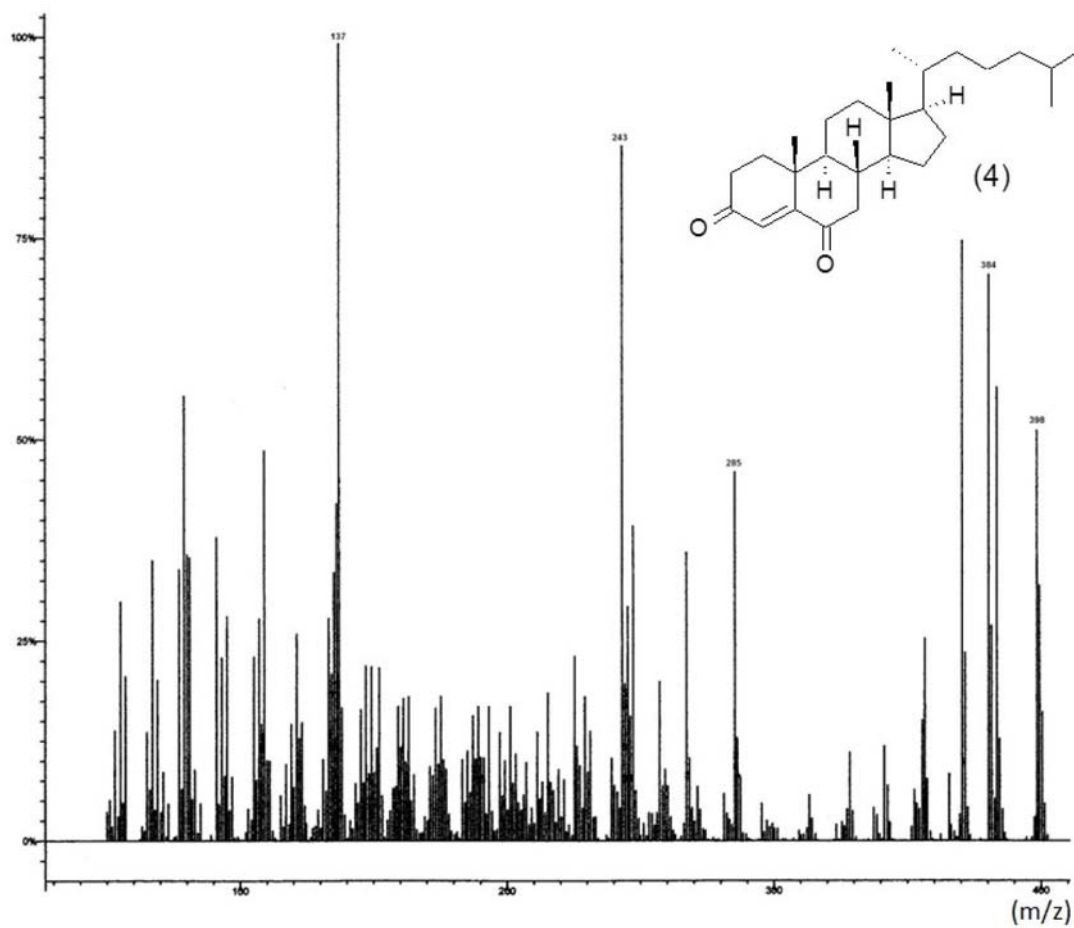


Figura 3S. EI-MS spectrum of 4-cholesten-3,6-dione (4)

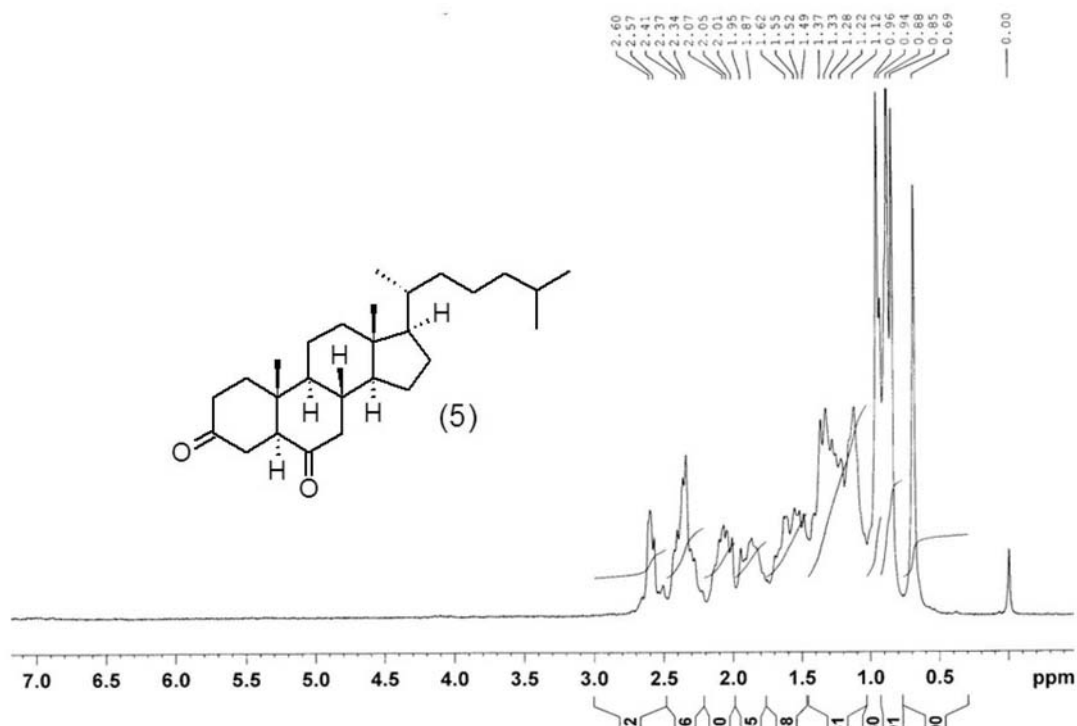


Figura 4S. <sup>1</sup>H NMR spectrum of 3,6-cholestandione (5), 200 MHz, CDCl<sub>3</sub>

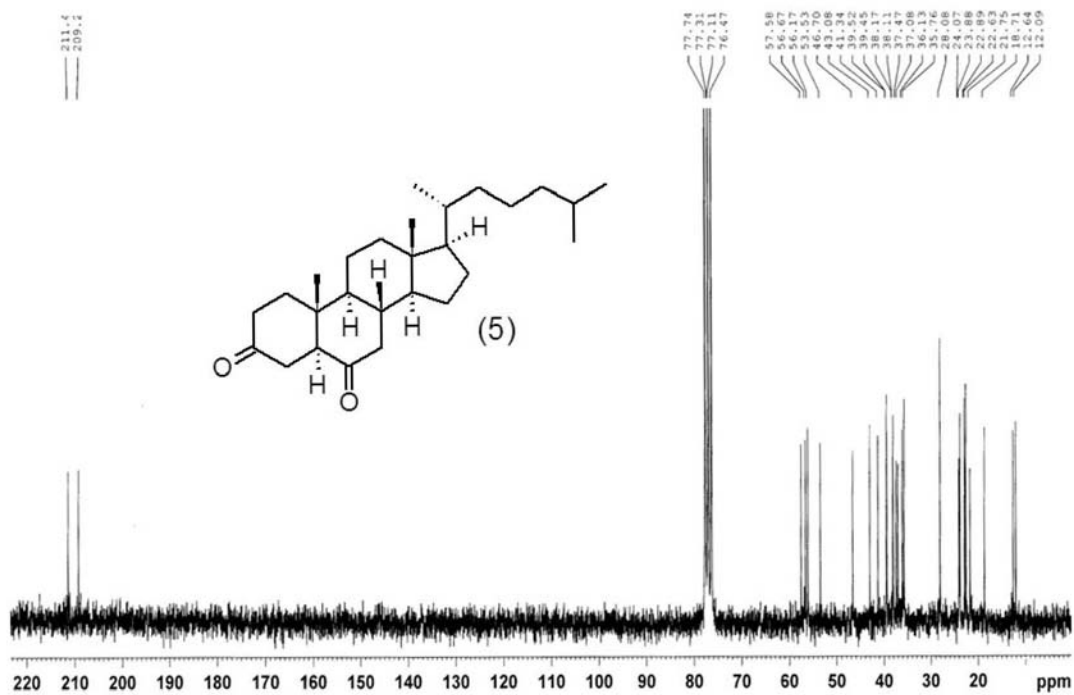


Figura 5S. <sup>13</sup>CNMR spectrum of 3,6-cholestandione (5), 50 MHz, CDCl<sub>3</sub>

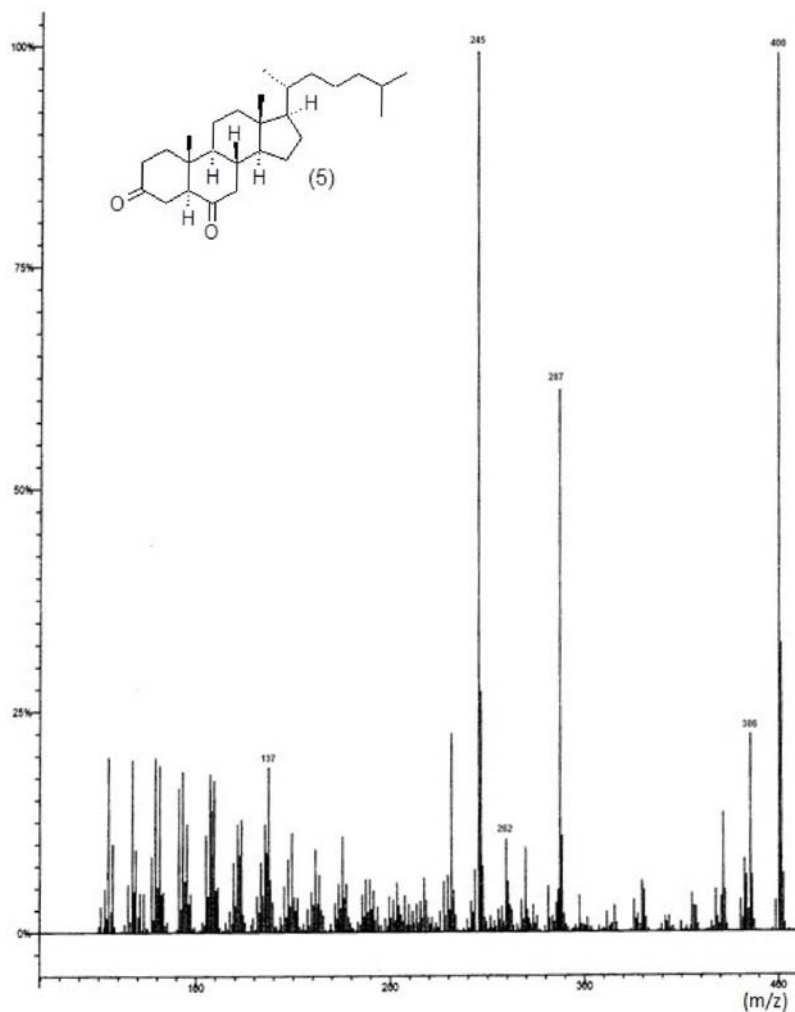


Figura 6S. EI-MS spectrum of 3,6-cholestandione (5)

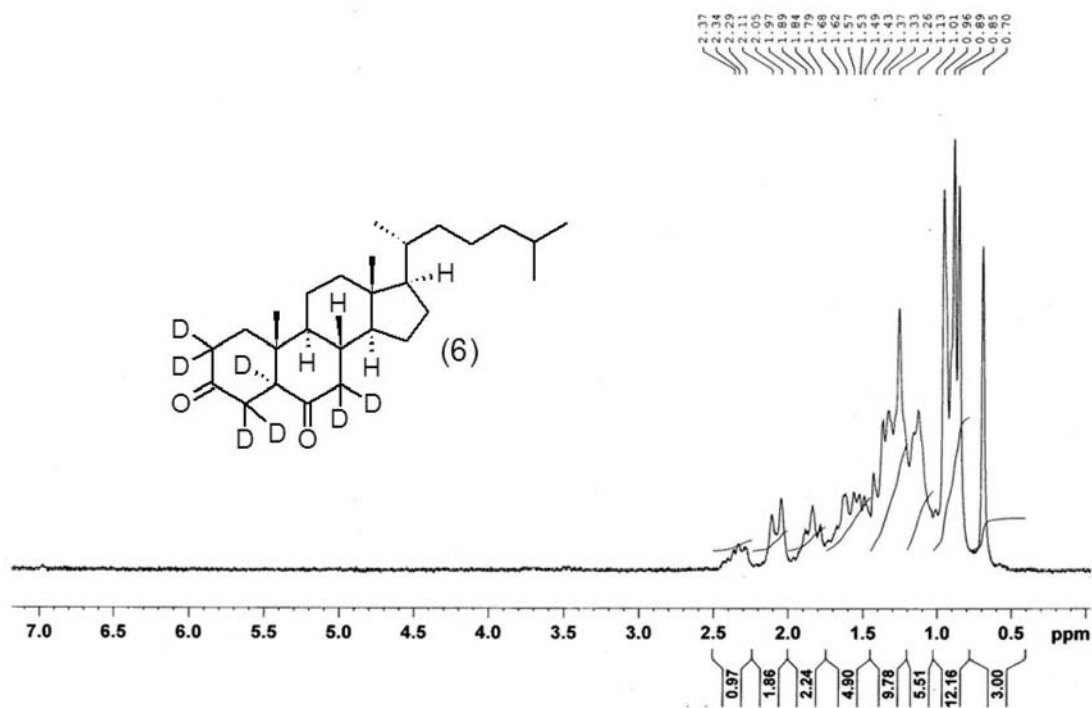


Figura 7S. <sup>1</sup>H NMR spectrum of 3,6-cholestandione-2,2,4,4,5,7,7-d<sub>7</sub> (6), 200 MHz, CDCl<sub>3</sub>

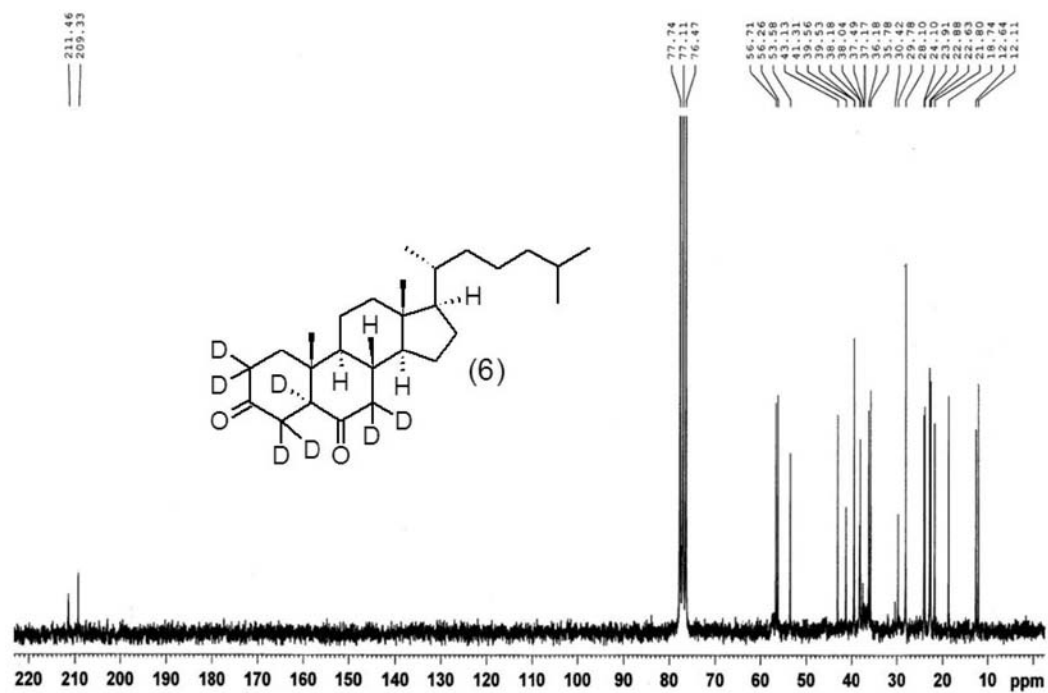


Figura 8S. <sup>13</sup>C NMR spectrum of 3,6-cholestandione-2,2,4,4,5,7,7-d<sub>7</sub> (6), 50 MHz, CDCl<sub>3</sub>

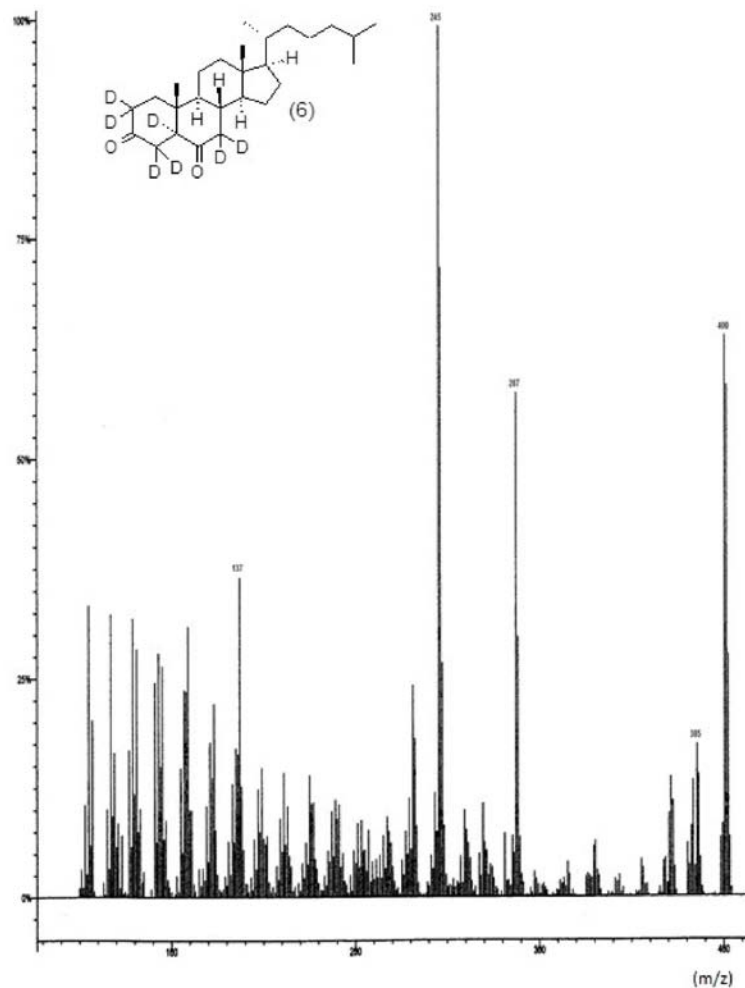


Figura 9S. EI-MS spectrum of 3,6-cholestandione-2,2,4,4,5,7,7-d<sub>7</sub> (6)

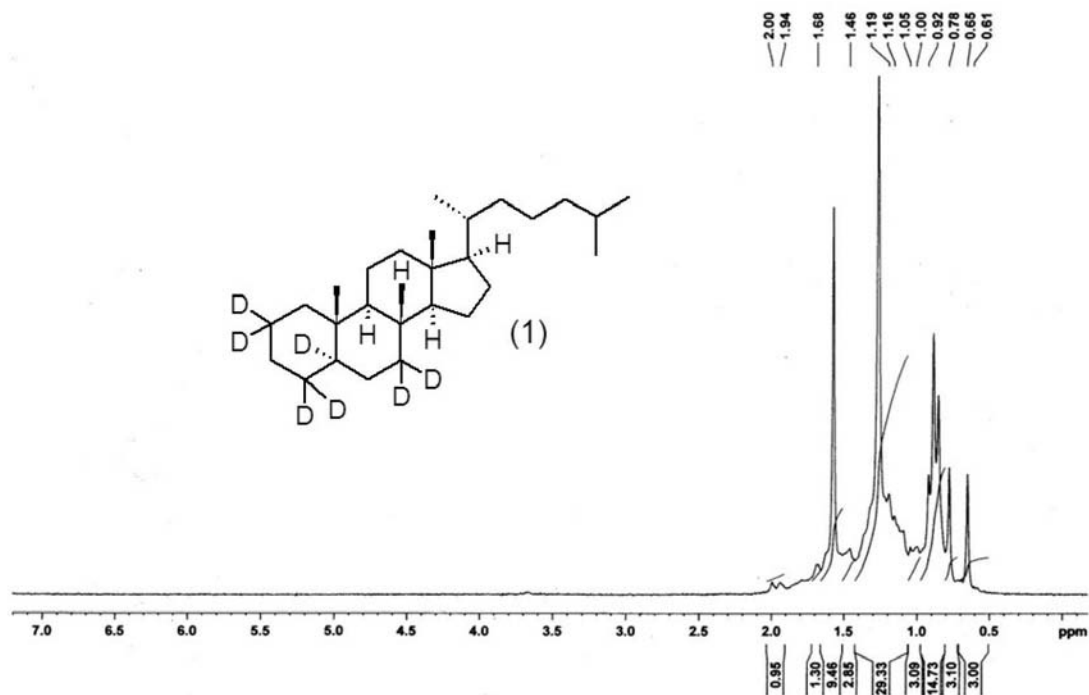


Figura 10S. <sup>1</sup>H NMR spectrum of cholestane-2,2,4,4,5,7,7-d<sub>7</sub> (1), 200 MHz, CDCl<sub>3</sub>

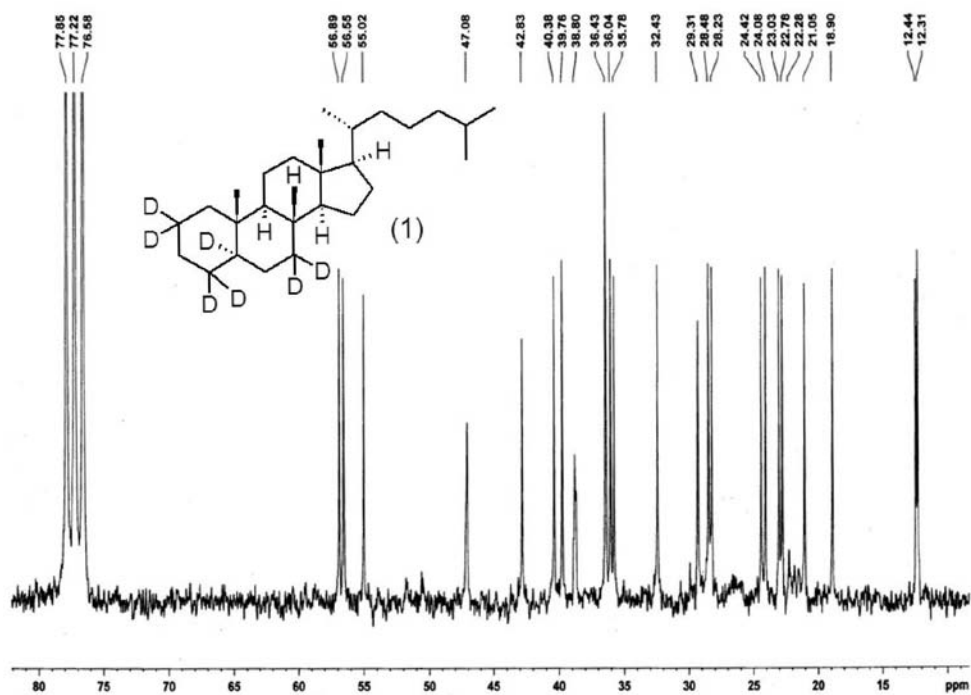


Figura 11S.  $^{13}\text{C}$ NMR spectrum of cholestane-2,2,4,4,5,7,7- $\text{d}_7$  (1), 50 MHz,  $\text{CDCl}_3$

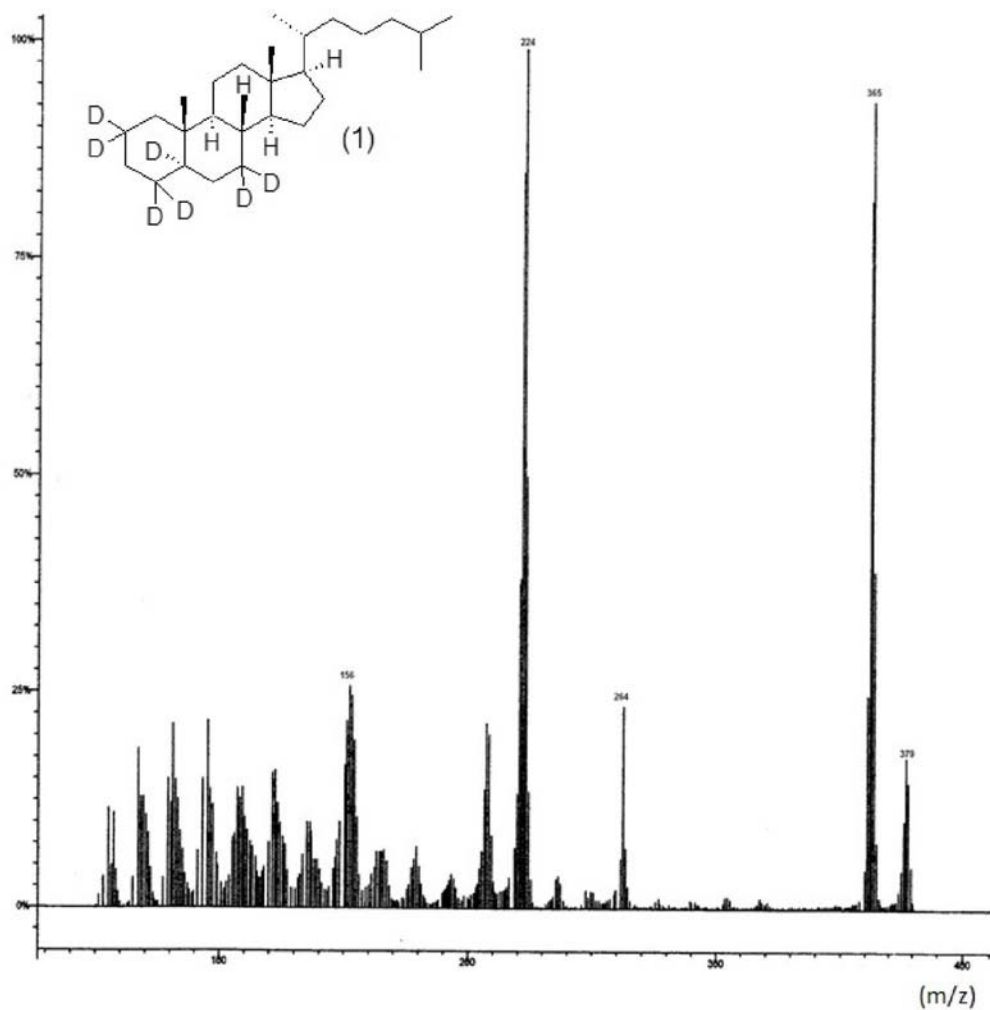


Figura 12S. EI-MS spectrum of cholestane-2,2,4,4,5,7,7- $\text{d}_7$  (1)