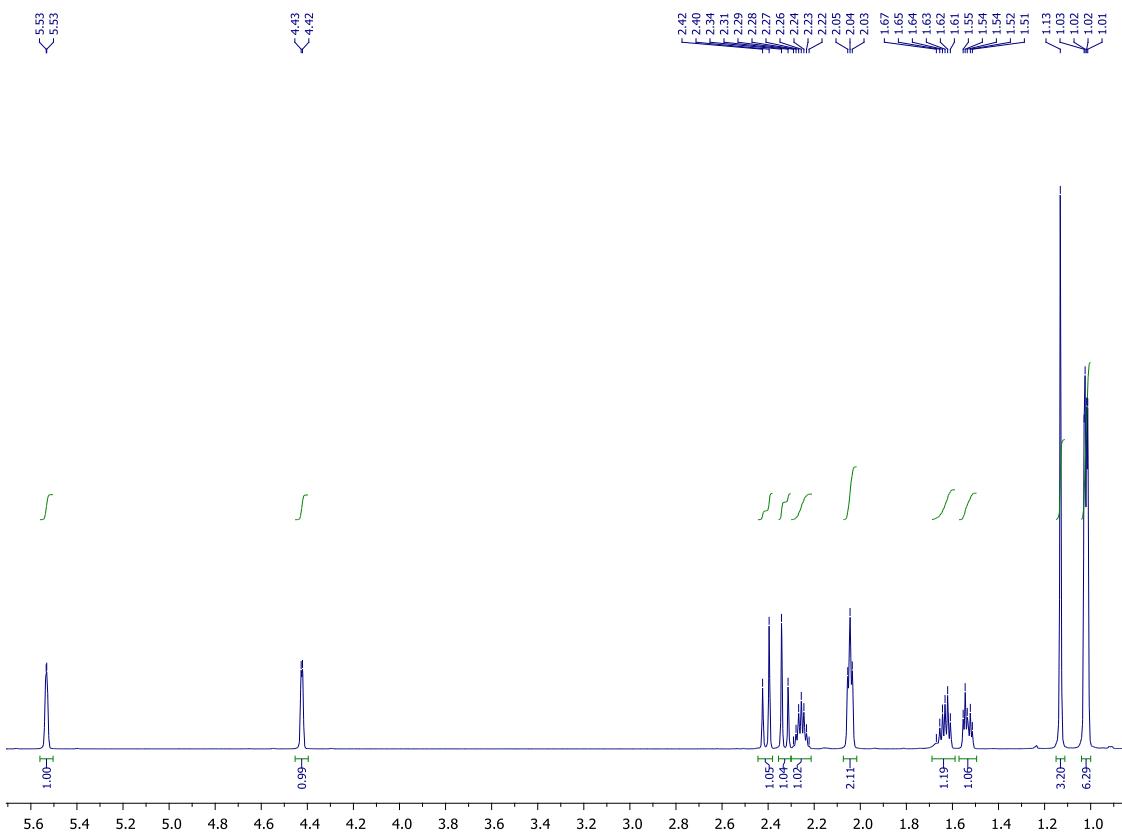


# Supplementary Materials

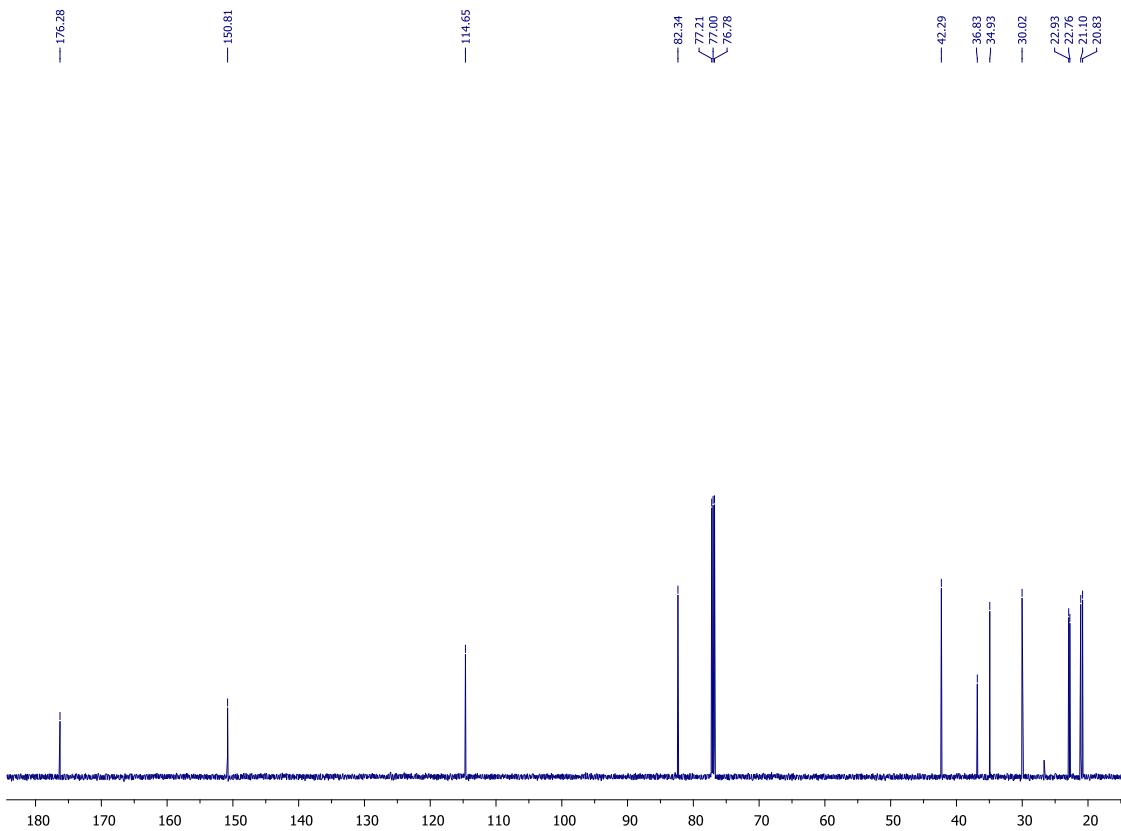
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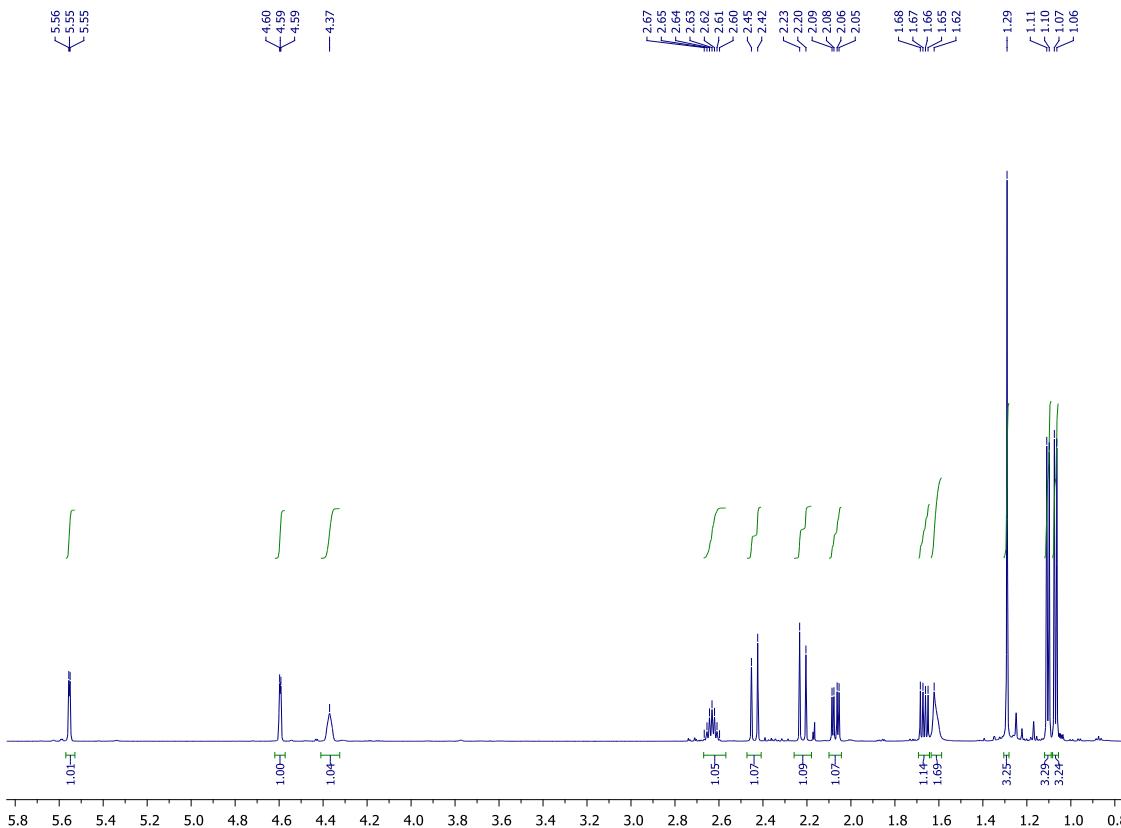
**Figure 1.** <sup>1</sup>H-NMR (CDCl<sub>3</sub>, 600 MHz) spectrum of **2**.



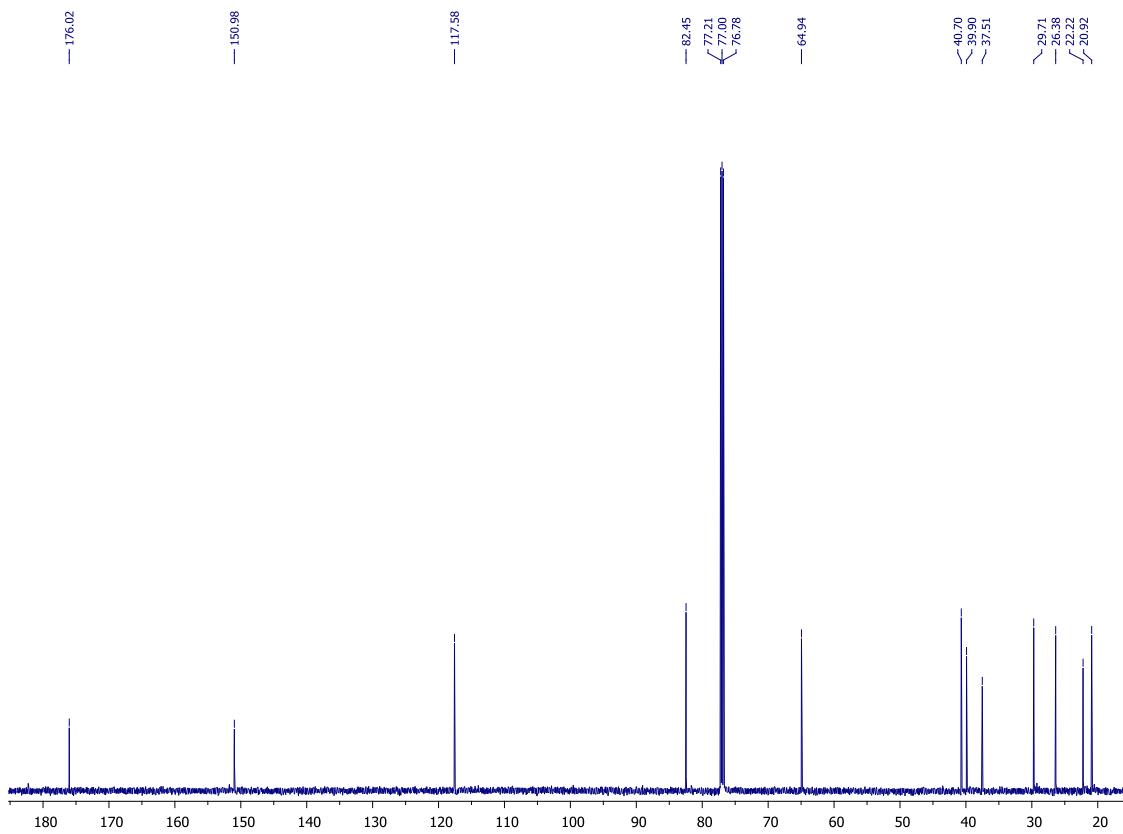
**Figure 2.**  $^{13}\text{C}$ -NMR ( $\text{CDCl}_3$ , 151 MHz) spectrum of **2**.



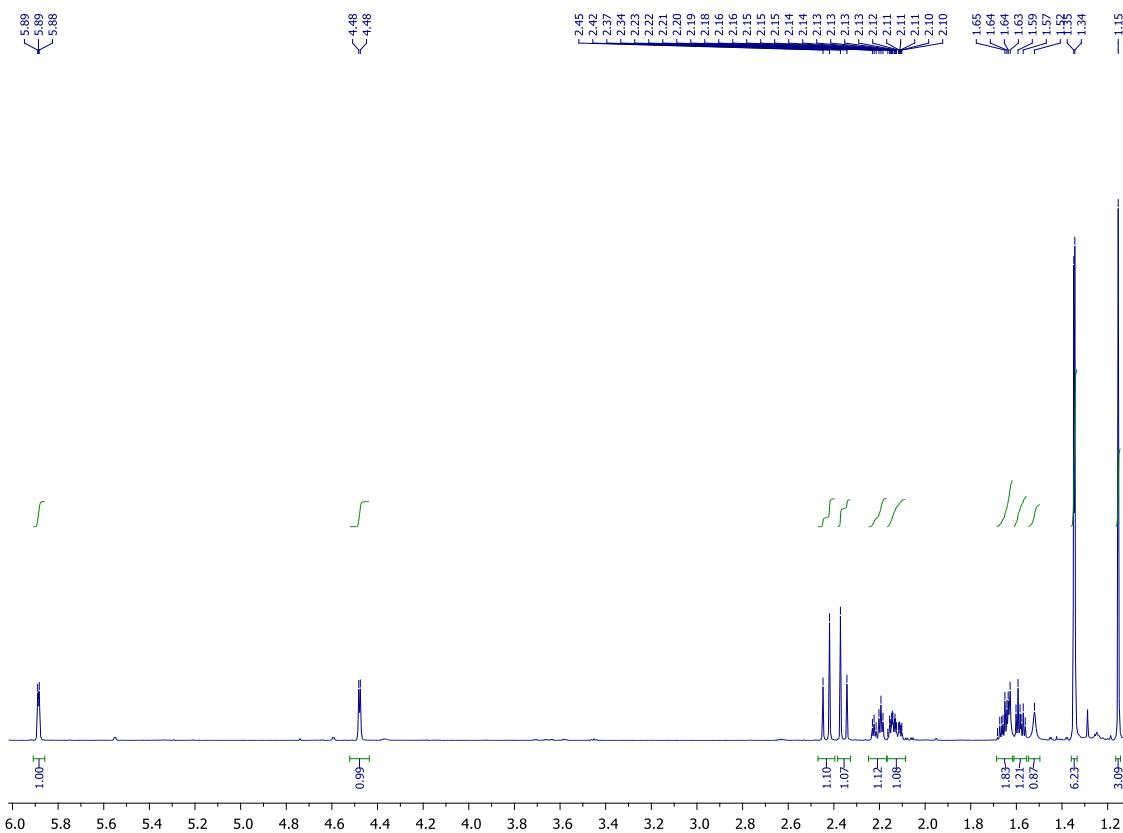
**Figure 3.**  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ , 600 MHz) spectrum of **3**.

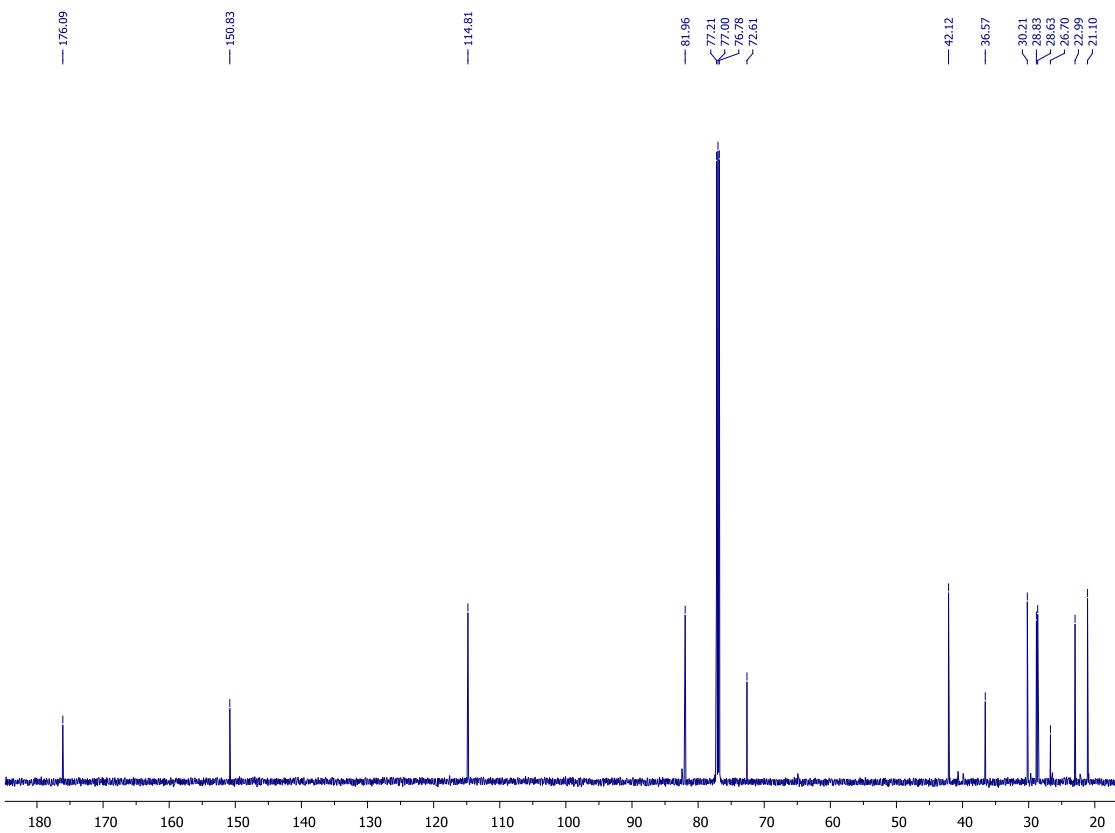


**Figure 4.**  $^{13}\text{C}$ -NMR ( $\text{CDCl}_3$ , 151 MHz) spectrum of **3**.



**Figure 5.**  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ , 600 MHz) spectrum of **4**.



**Figure 6.**  $^{13}\text{C}$ -NMR ( $\text{CDCl}_3$ , 151 MHz) spectrum of **4**.**Figure 7.** CGC chromatograms of unsaturated lactones: (a)  $(\pm)$ -2; (b)  $(+)$ -2, ee = 96%; (c)  $(-)$ -2, ee = 98%.