

Catalysts

Enzymatic synthesis of ascorbic acid-ketone bodies hybrids.

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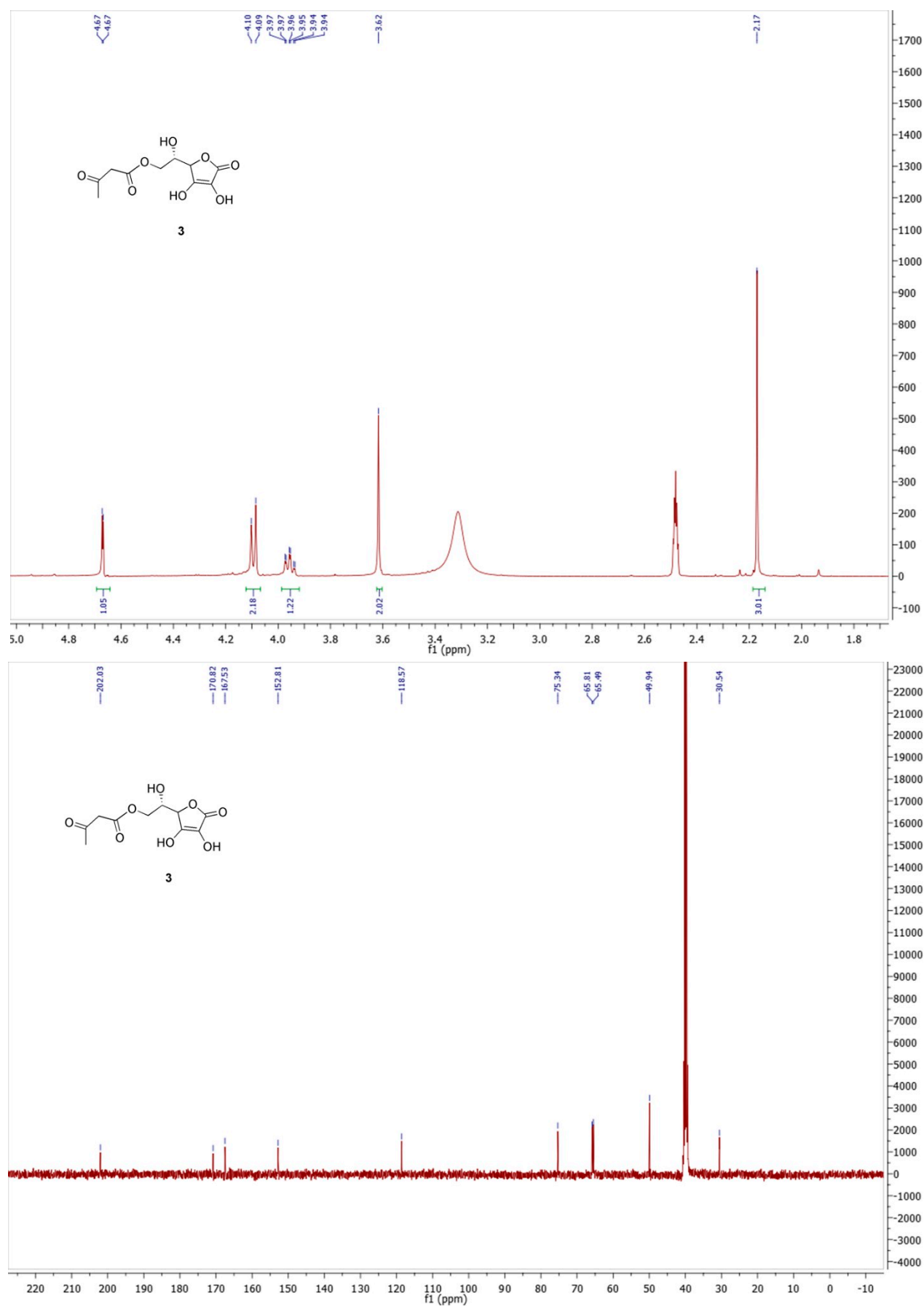


Figure S1. ¹H- and ¹³C-NMR spectra of compound 3

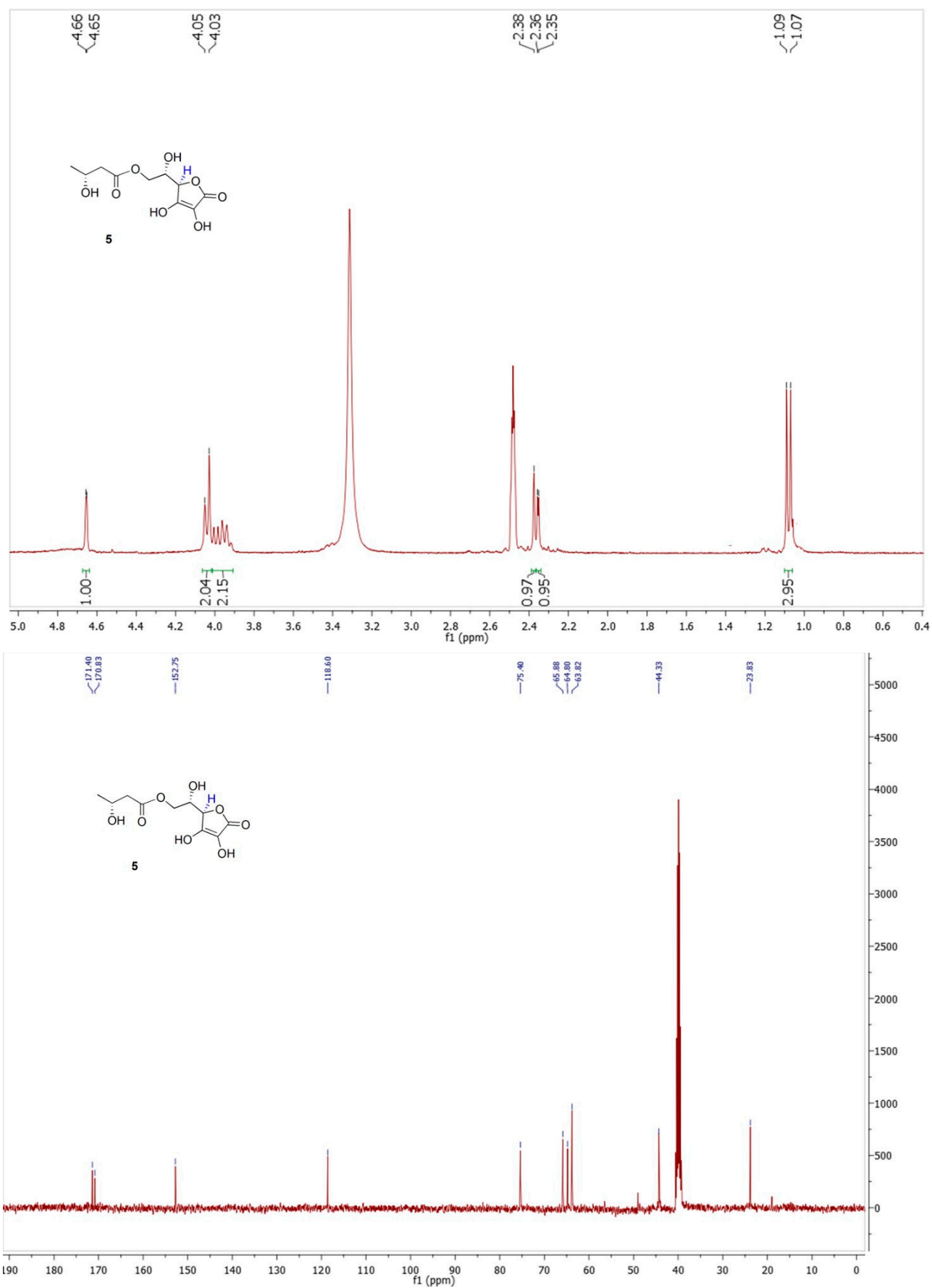


Figure S2. ¹H- and ¹³C-NMR spectra of compound 5.

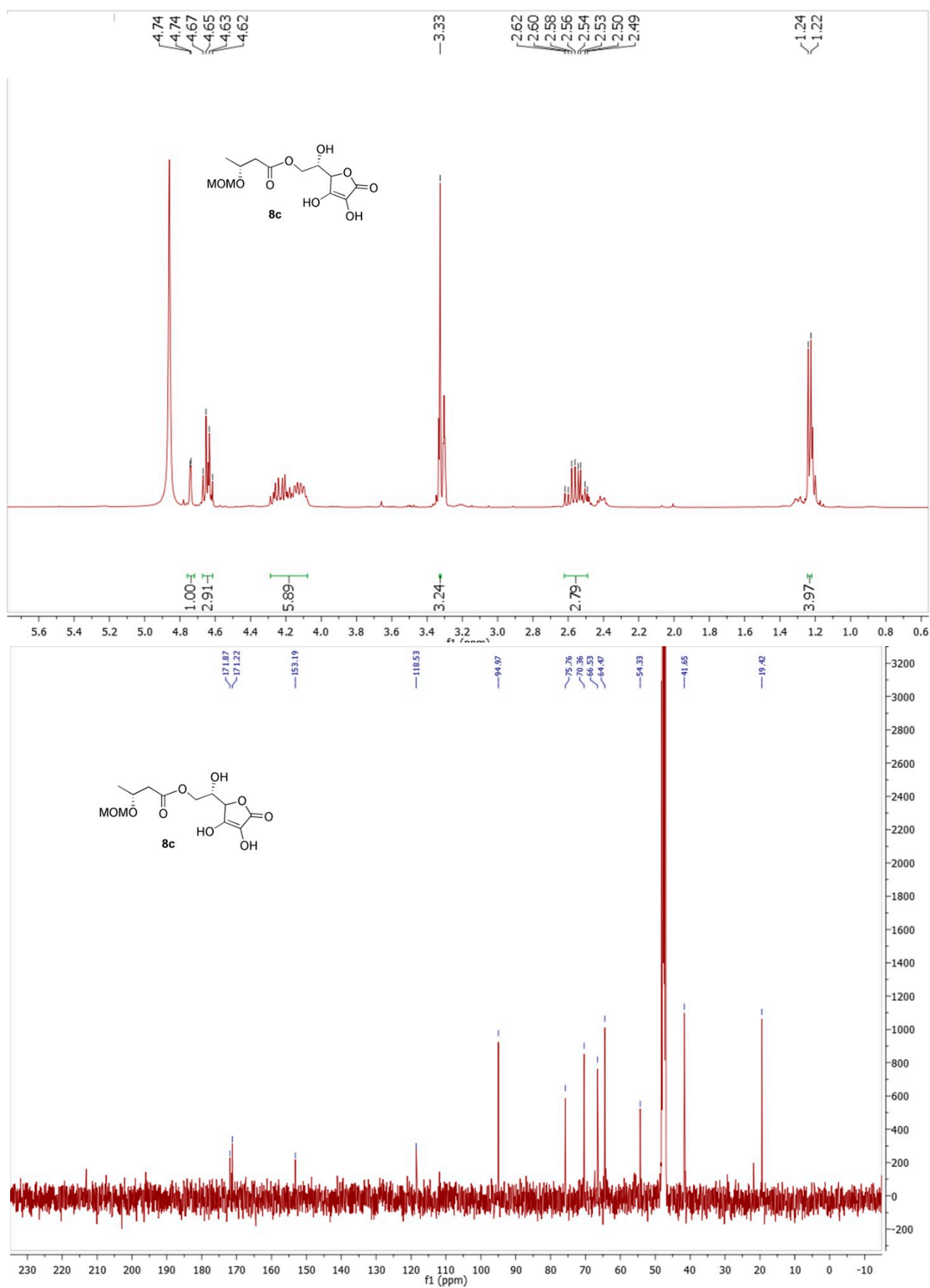


Figure S3. ¹H- and ¹³C-NMR spectra of compound **8c**.

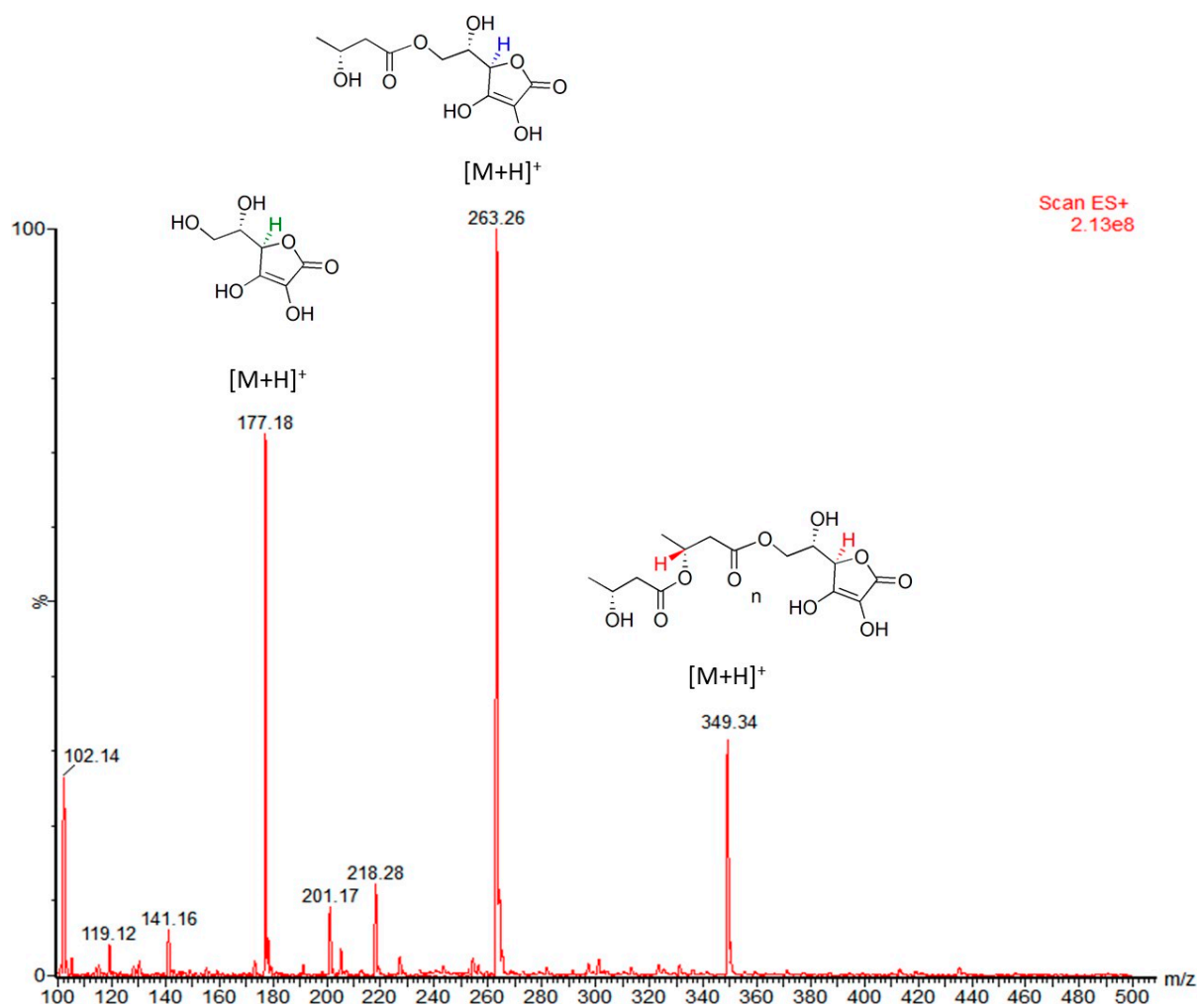


Figure S4. ESI-MS spectra of the reaction mixtures of the esterification of **2** performed with 16 equivalents of **4** (reaction stopped after 3 hours)

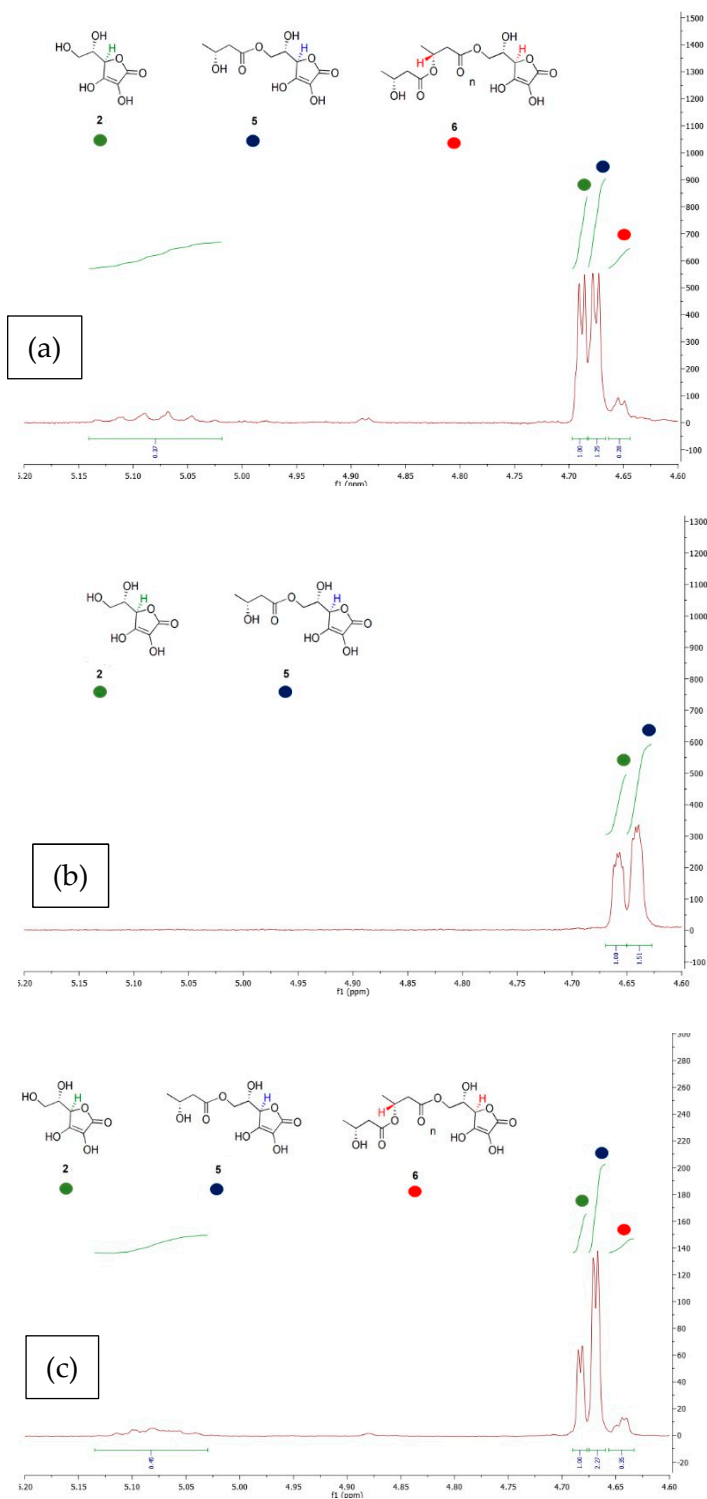


Figure S5. (a) ^1H NMR (selected data) of the reaction mixture performed with equimolar amounts of **2** and **4** after 4 hours. (b) ^1H NMR (selected data) of the reaction mixture performed with 2 equivalents of **4** after 3.5 hours. (c) ^1H NMR (selected data) of the reaction mixture performed with 3 equivalents of **4** after 3 hours.

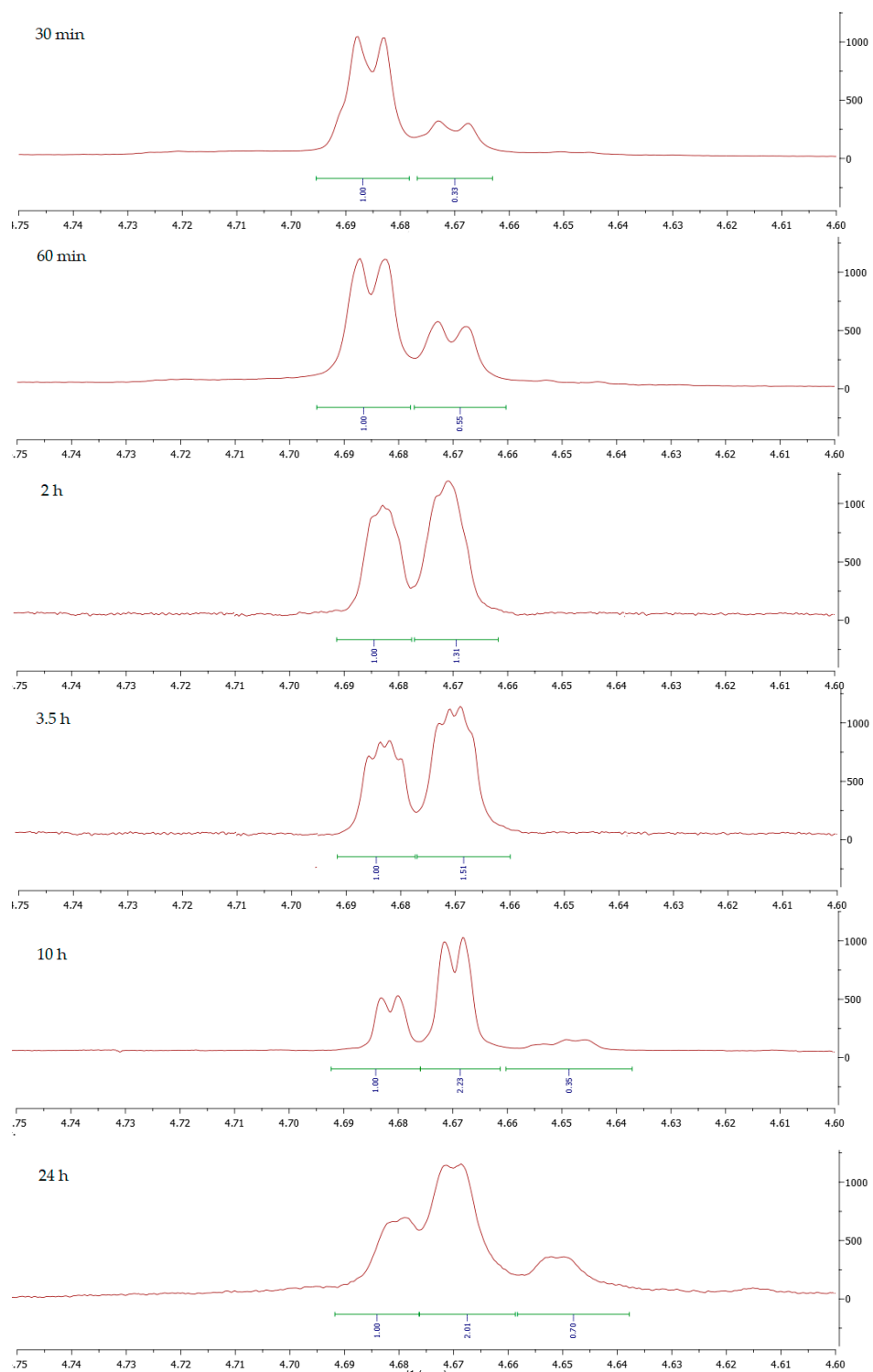
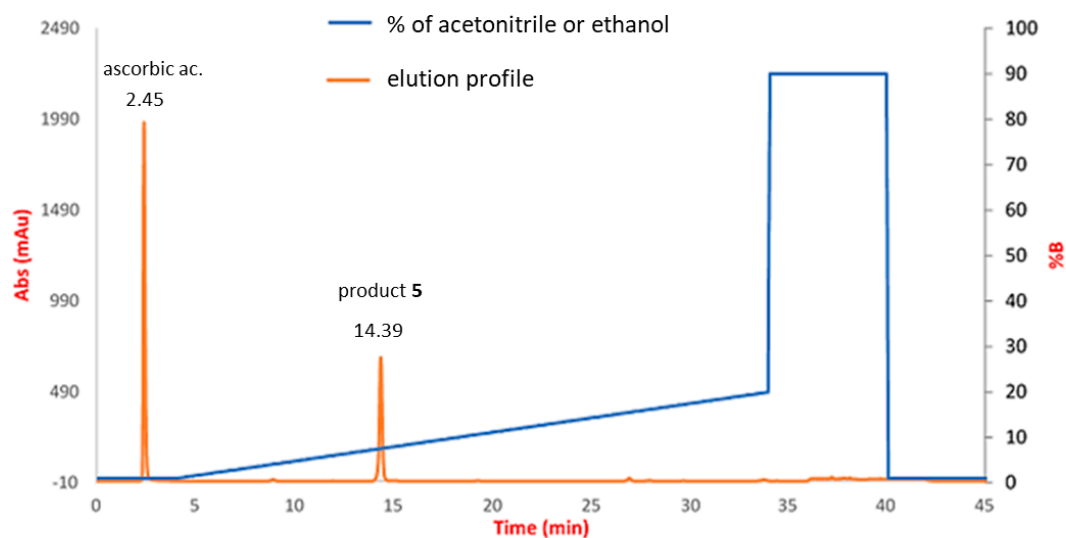


Figure S6. ^1H -NMR analyses (selected data) for the time course study of the esterification of **2** performed with 2 equivalents of **4**



Column: Zorbax SB-C18 150 × 4.6 mm

Flow rate: 1 mL/min,

Mobile phase: water/acetonitrile (or ethanol) + 0.05% formic acid

Acetonitrile (or ethanol) gradient: i) isocratic at 1% for 4 min; ii) from 1% to 20% in 30 min; iii) washing at 90%.

Figure S7. HPLC chromatogram of the esterification of 2 performed with 2 equivalents of 4