Electronic Supplementary Material (ESI) for RSC Advances.
This journal is © The Royal Society of Chemistry 2014

Supplementary data

Synthesis of *β*-ketoesters from renewable resources and Meldrum's acid

Rafael C. Brinkerhoff[a], Hernan F. Tarazona[a], Patrick M. de Oliveira[a], Darlene C. Flores[a], Caroline Da R. Montes D'Oca[b], Dennis Russowsky[b], and Marcelo G. Montes D'Oca[a*]

[a]*Laboratório Kolbe de Síntese Orgânica, Escola de Química e Alimentos, Universidade Federal do Rio Grande, Rio Grande, RS, Brazil*
[b]*Laboratório de Síntese Orgânica, Instituto de Química, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil*

List of Contents

~~General Considerations~~

* Corresponding author: Escola de Química e Alimentos, Universidade Federal do Rio Grande, Av. Itália, km 08, s/n. Carreiros. 96203-900. Rio Grande, RS, Brazil. Tel: +55 53 32336960; fax +55 53 3233 6961. E-mail address: dqmdoca@furg.br (MGM D'Oca)

Chemistry. All solvents and reagents were obtained from commercial suppliers (Synth, Brazil; and Sigma Aldrich, United States). Column chromatography was performed with Silica Gel 60 A (ACROS Organics 0.035–0.070 mesh). The reactions were monitored using thin-layer chromatography (TLC), performed with plates containing silica gel (Merck $60GF_{245}$), and the spots were visualized using iodo. Yields refer to chromatographically and spectroscopically homogeneous materials. Infrared spectra were measured using potassium bromide (KBr) pellets or sodium chloride (NaCl) disks on a Schimadzu-IR PRESTIGIE-21 spectrometer. The NMR spectra were recorded on a Varian VNMRS 300 MHz spectrometer (^{1}H at 300 MHz and ^{13}C at 75.5 MHz, Universidade Federal do Rio Grande do Sul, UFRGS, Brazil) in deuterochloform ($CDCl_3$) solution. The chemical shift data are reported in units of δ (ppm) downfield from tetramethylsilane (TMS), which was used as an internal standard. Coupling constants (J) are reported in Hz and refer to apparent peak multiplicities.

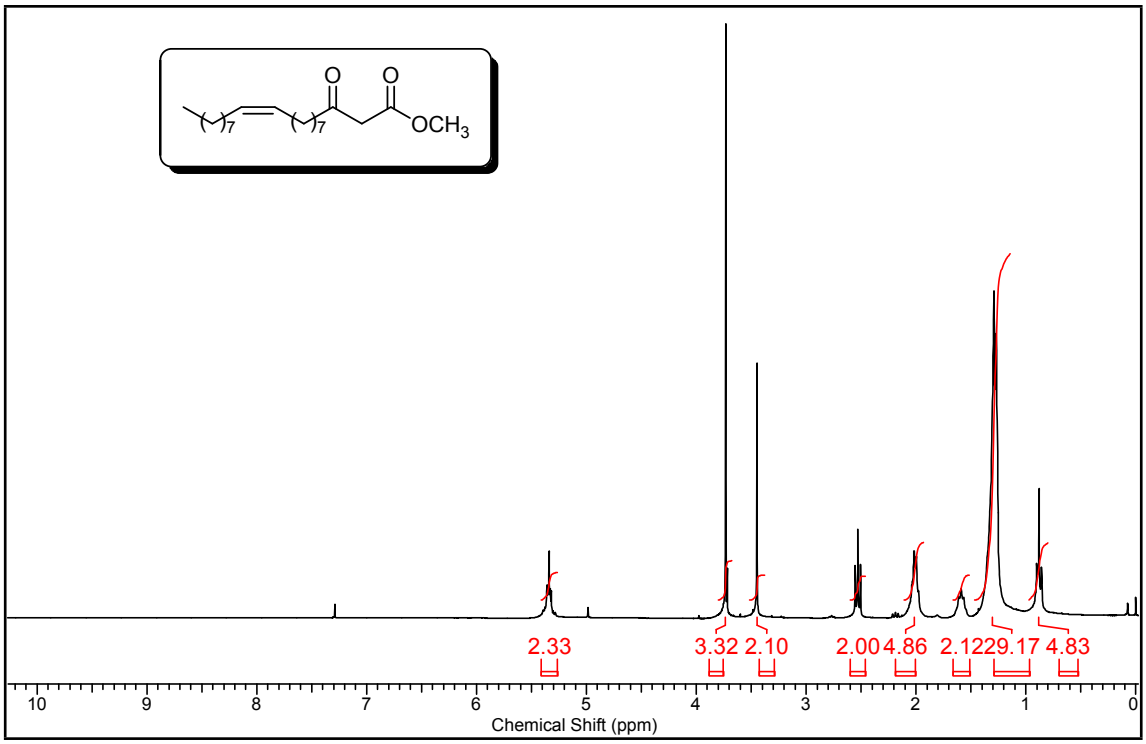

Figure S1. ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) of **4g**.

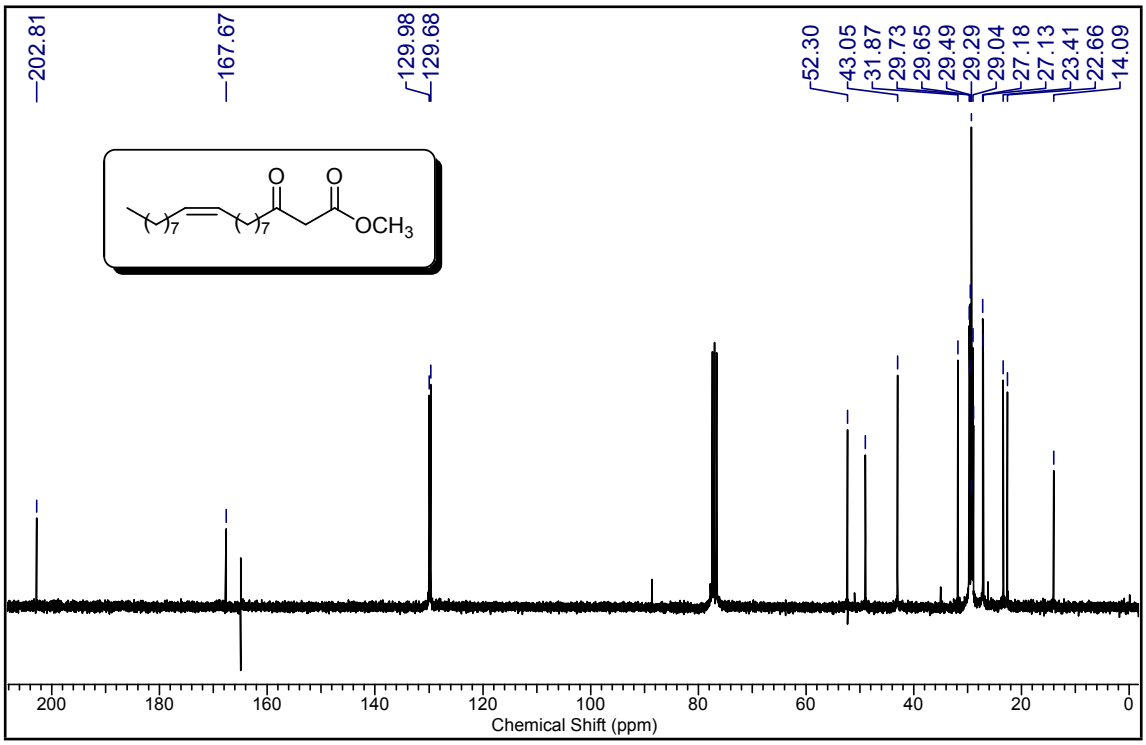

Figure S2. ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) of **4g**.

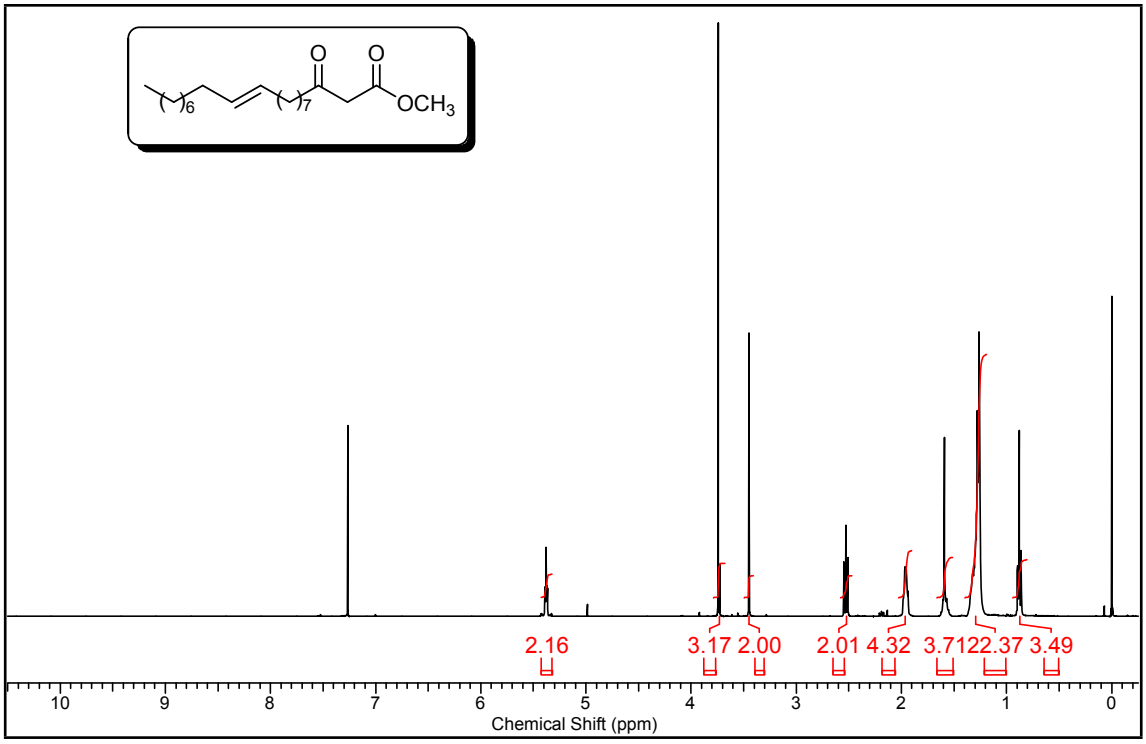

Figure S3. ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) of **4h**.

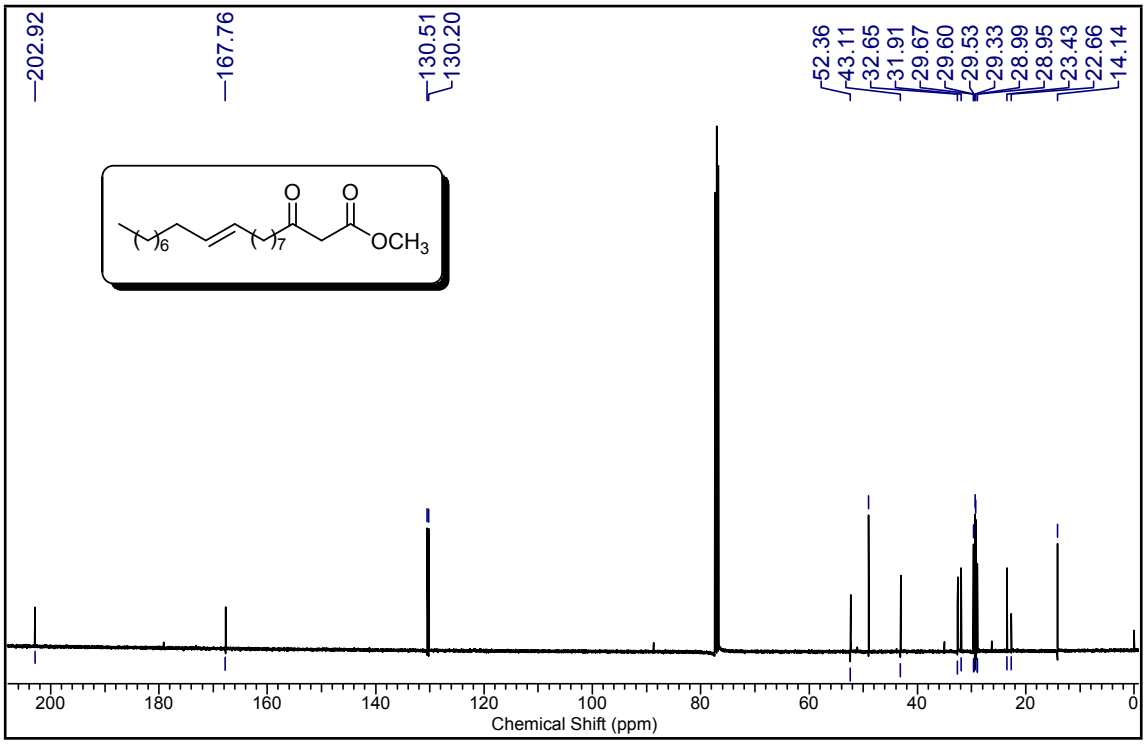

Figure S4. ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) of **4h**.

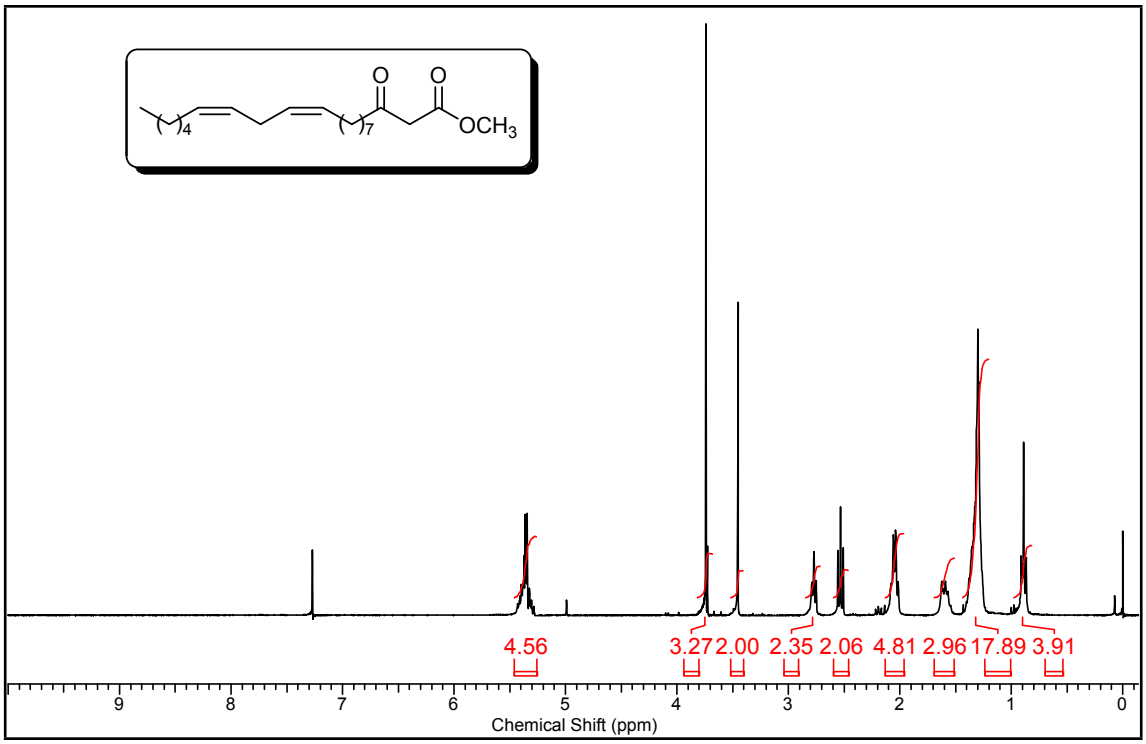

Figure S5. ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) of **4i**.

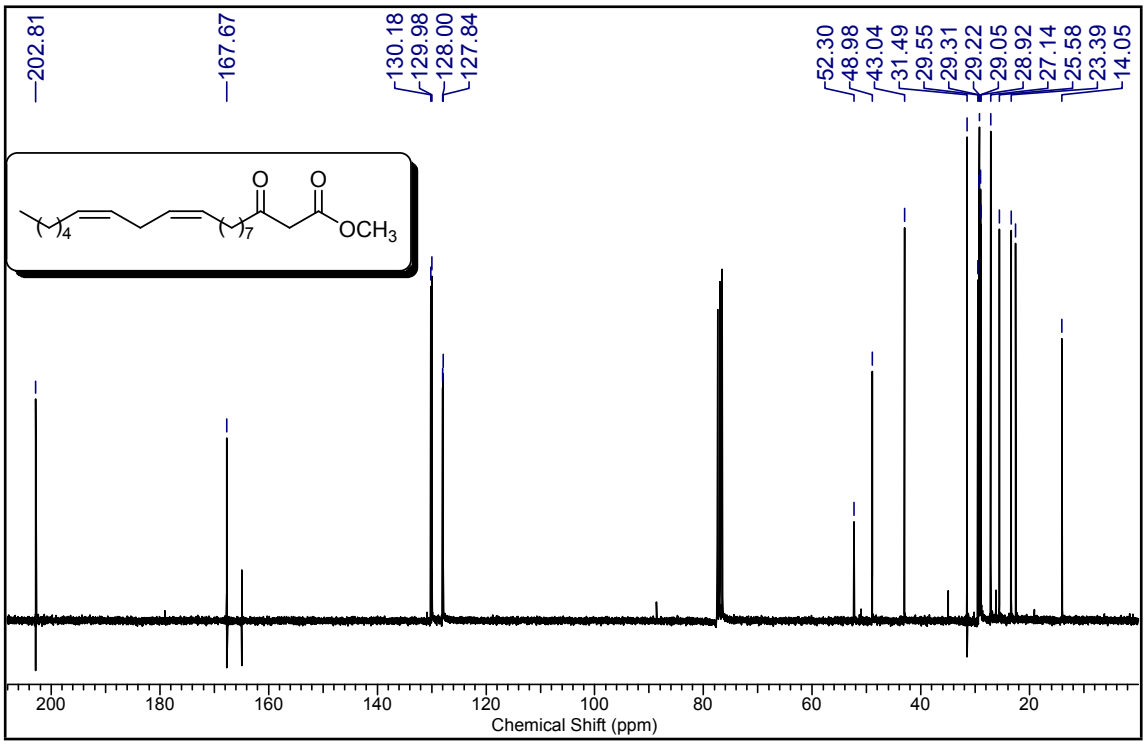

Figure S6. ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) of **4i**.

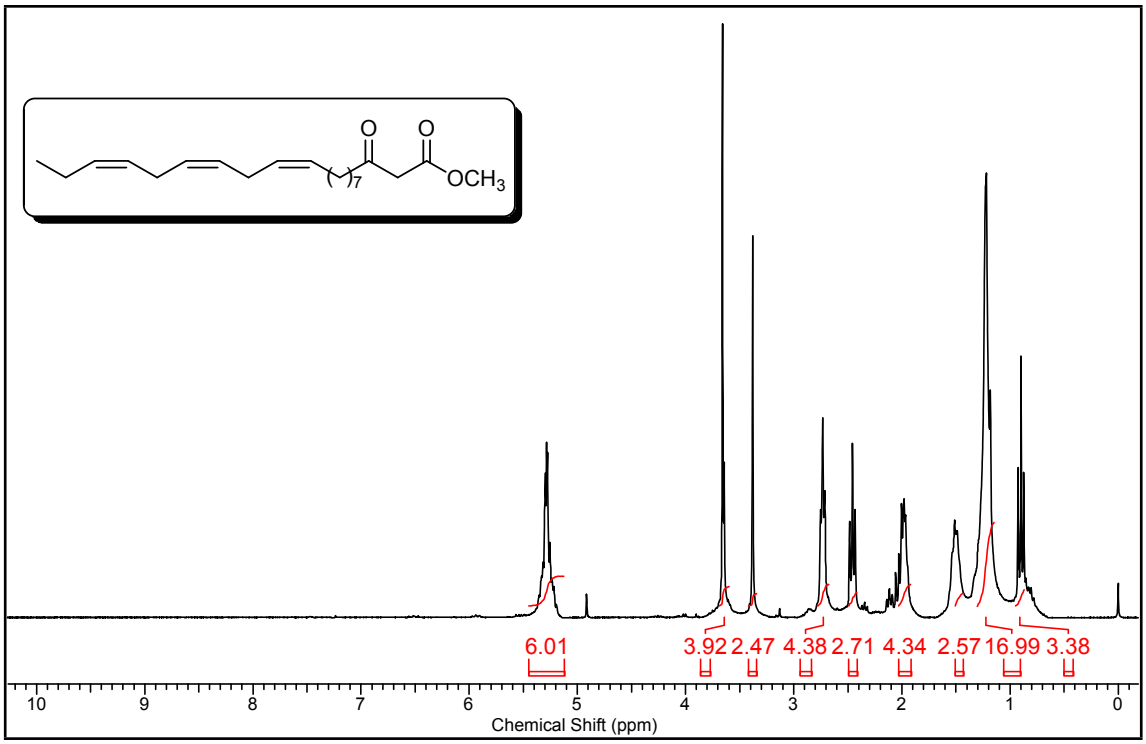

Figure S7. ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) of **4j**.

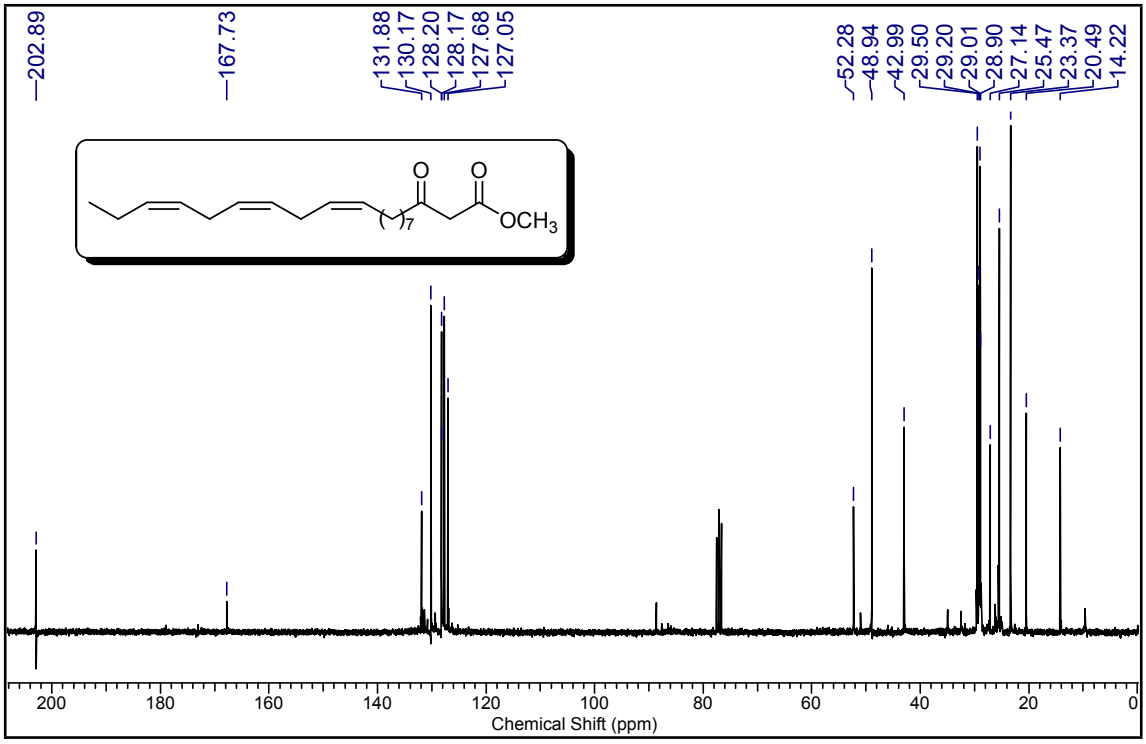

Figure S8. ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) of **4j**.

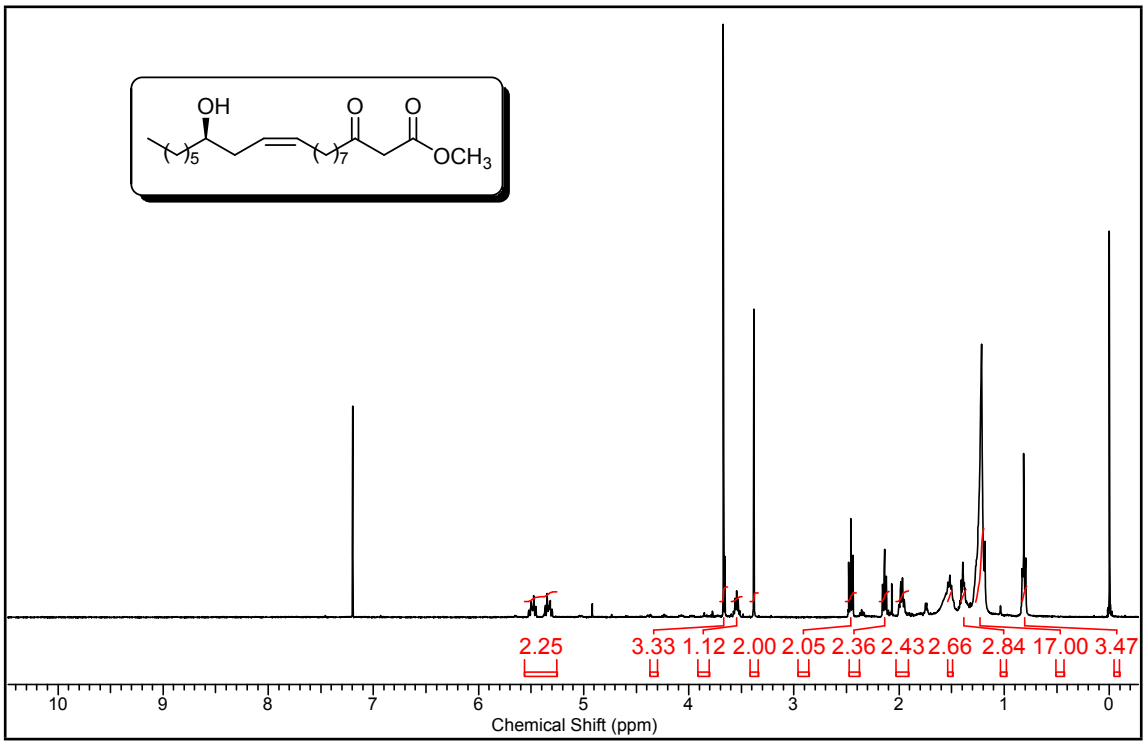

Figure S9. ^{1}H NMR spectrum ($CDCl_3$, 300 MHz) of **4k**.

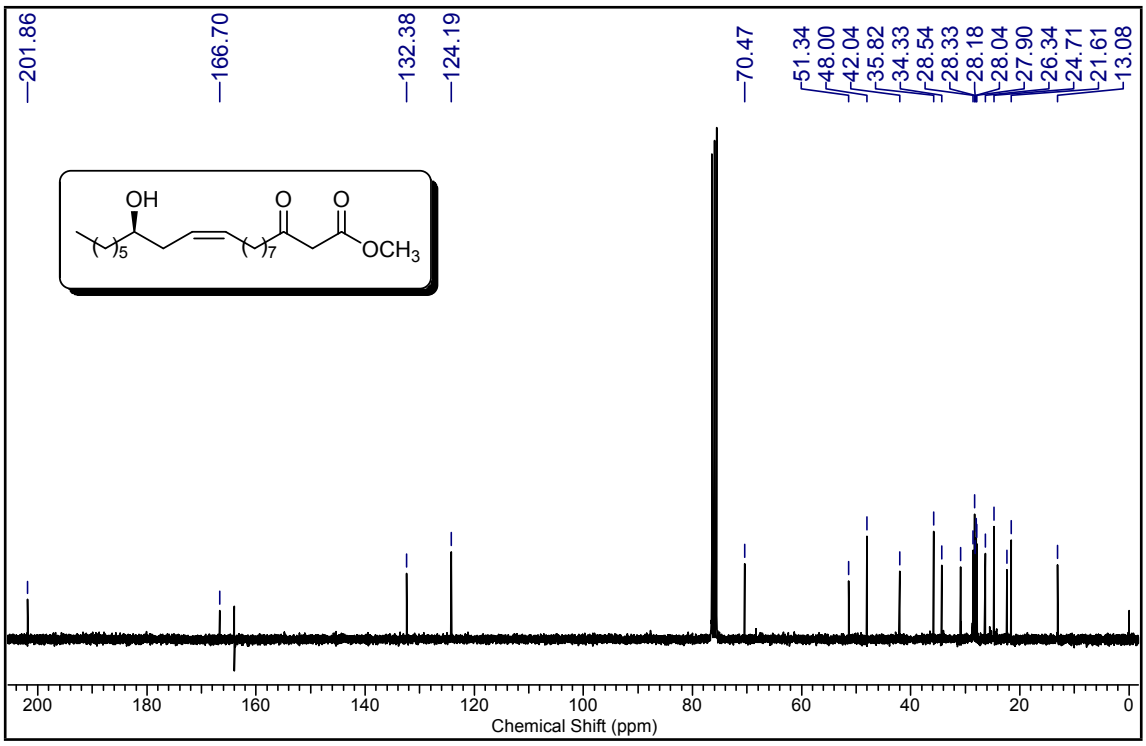

Figure S10. ^{13}C NMR spectrum ($CDCl_3$, 75 MHz) of **4k**.