

## Supporting Information

# Facile Semisynthesis and Evaluation of Garcinoic Acid and Its Analogs for the Inhibition of Human DNA Polymerase $\beta$

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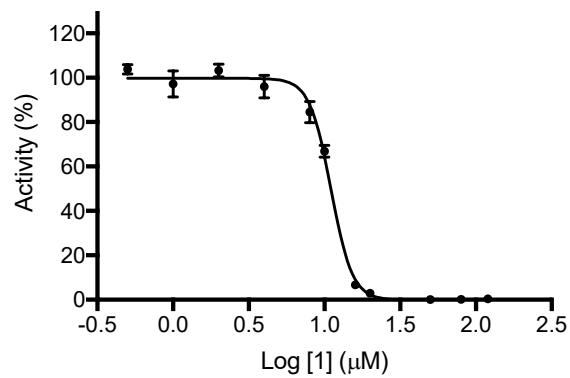
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<sup>2</sup> Department of Biochemistry and Molecular Biology, College of Medicine, University of Arkansas for Medical Sciences, Little Rock, AR 72205, USA

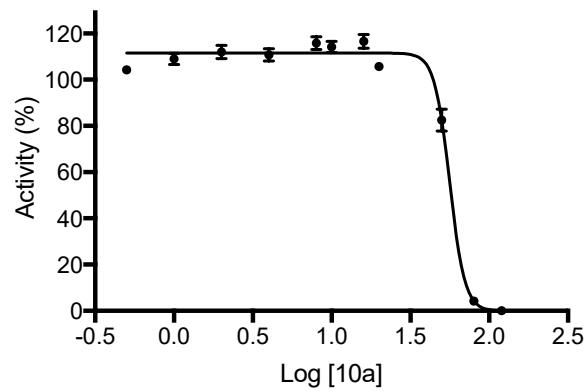
<sup>3</sup> Department of Medicinal Chemistry, College of Pharmacy, University of Florida, Gainesville, FL 32610, USA

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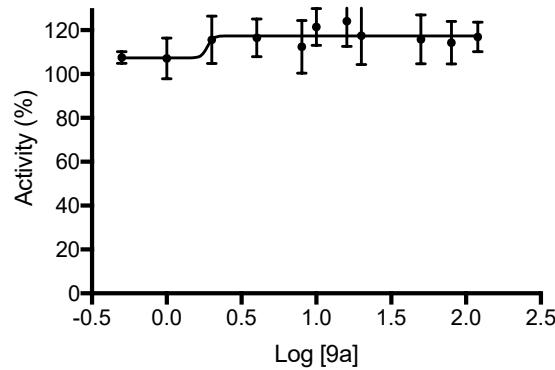
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Copies of $^1\text{H}$ & $^{13}\text{C}$ NMR Spectra.....	S-3



$\text{IC}_{50} = 11 \mu\text{M}$



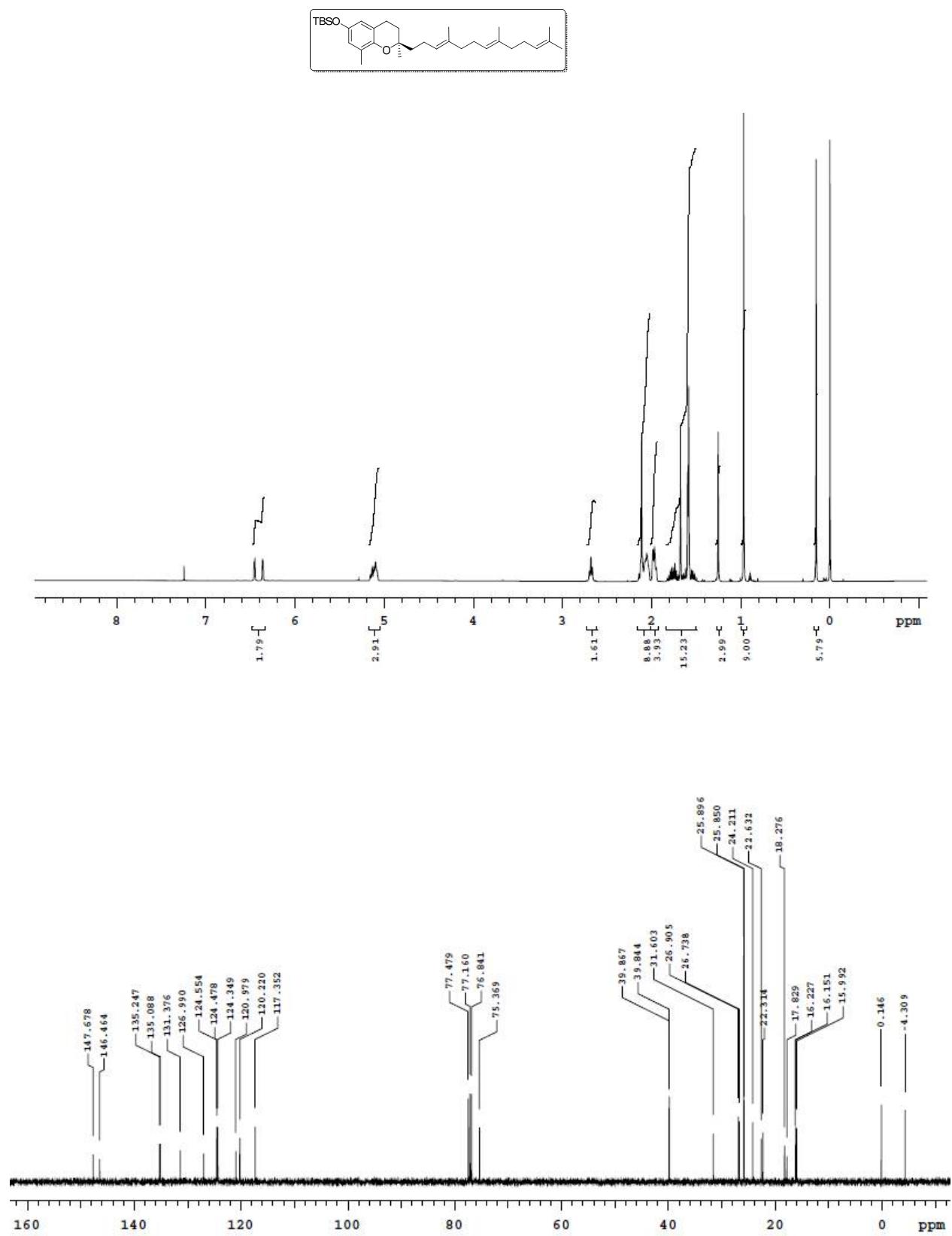
$\text{IC}_{50} = 52 \mu\text{M}$



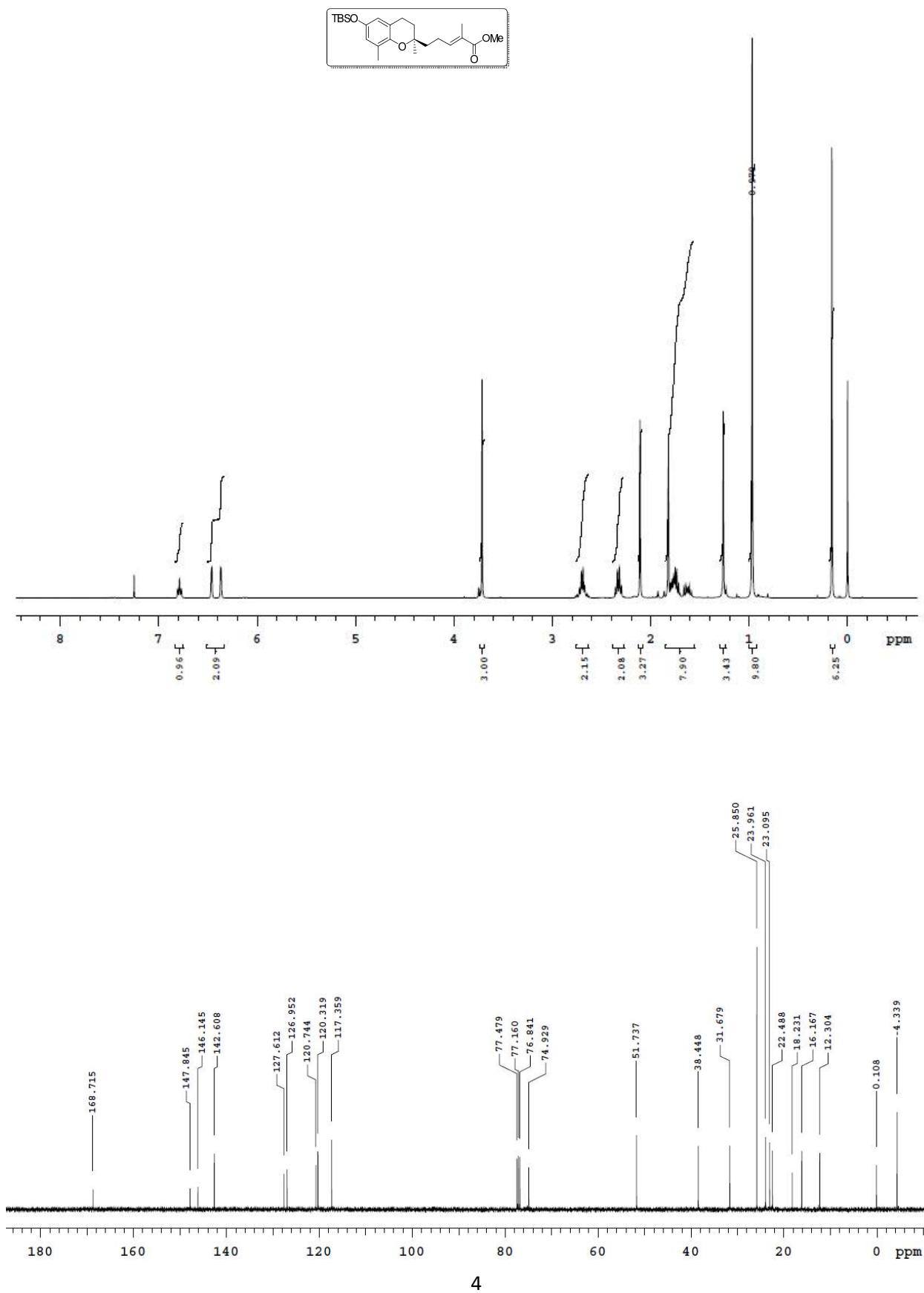
$\text{IC}_{50} > 120 \mu\text{M}$

**Figure S1.**  $\text{IC}_{50}$  determination of garcinoic acid (**1**), **10a**, and **9a** against hpol  $\beta$ .

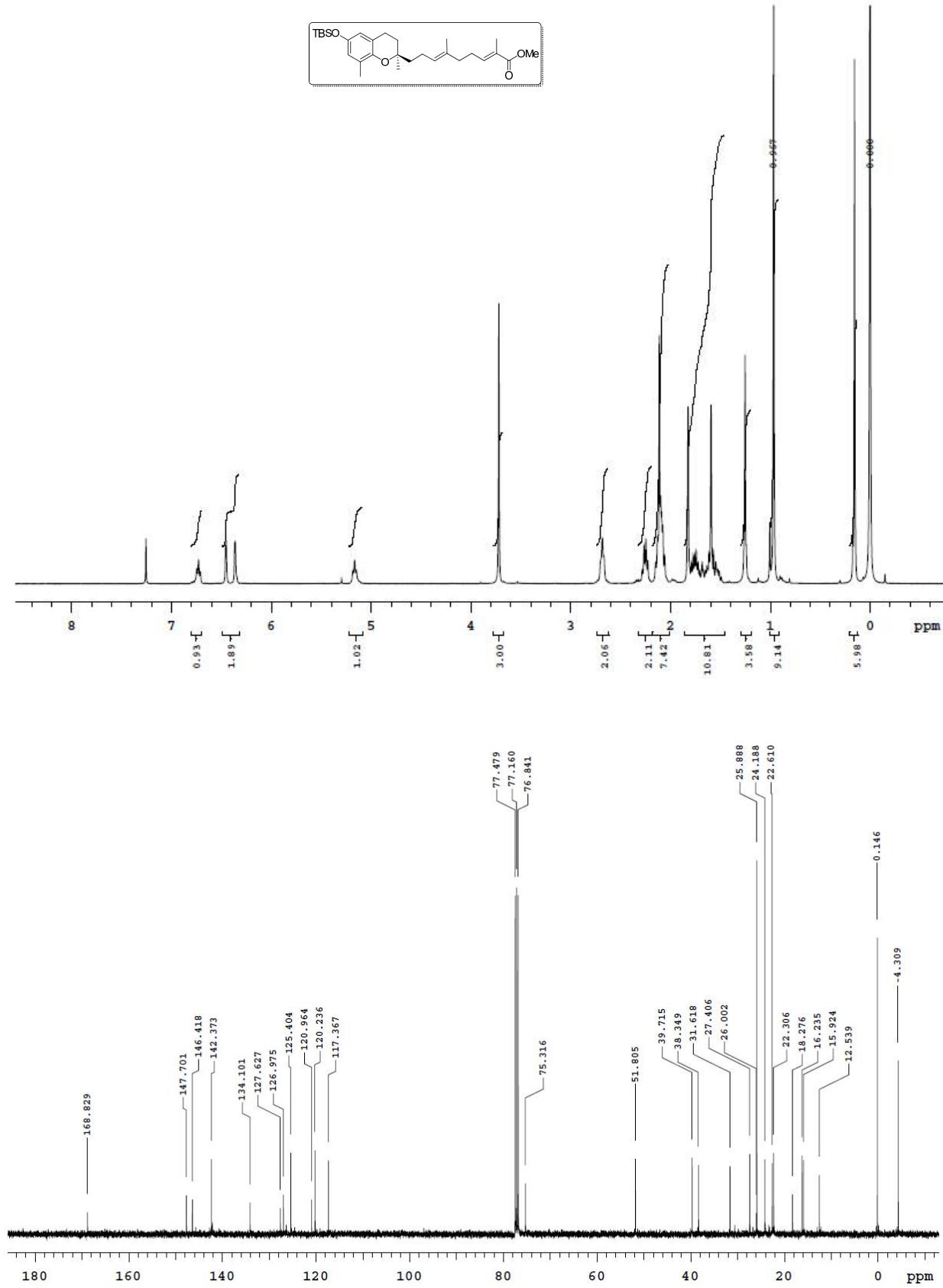
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 4



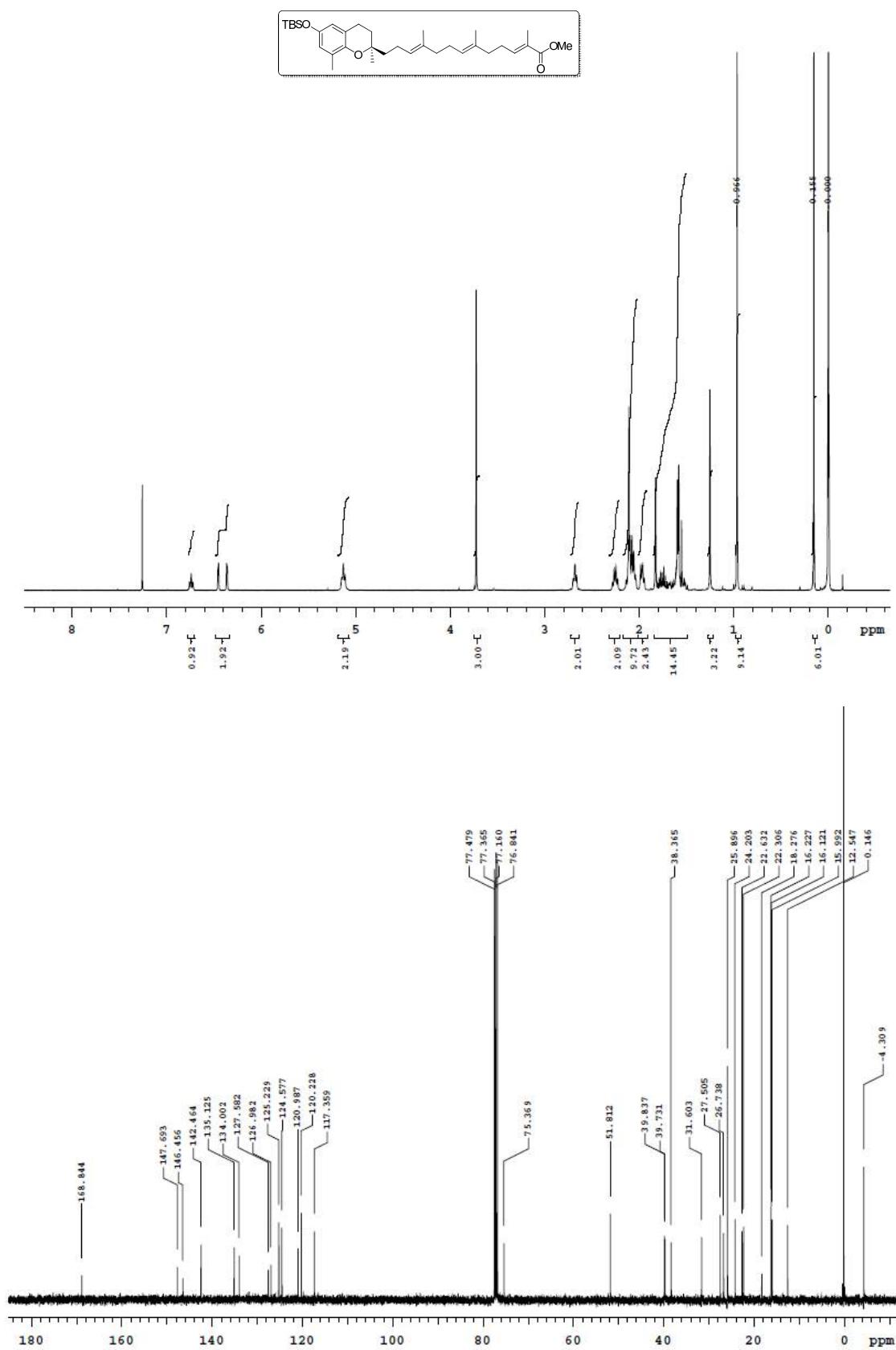
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 6a



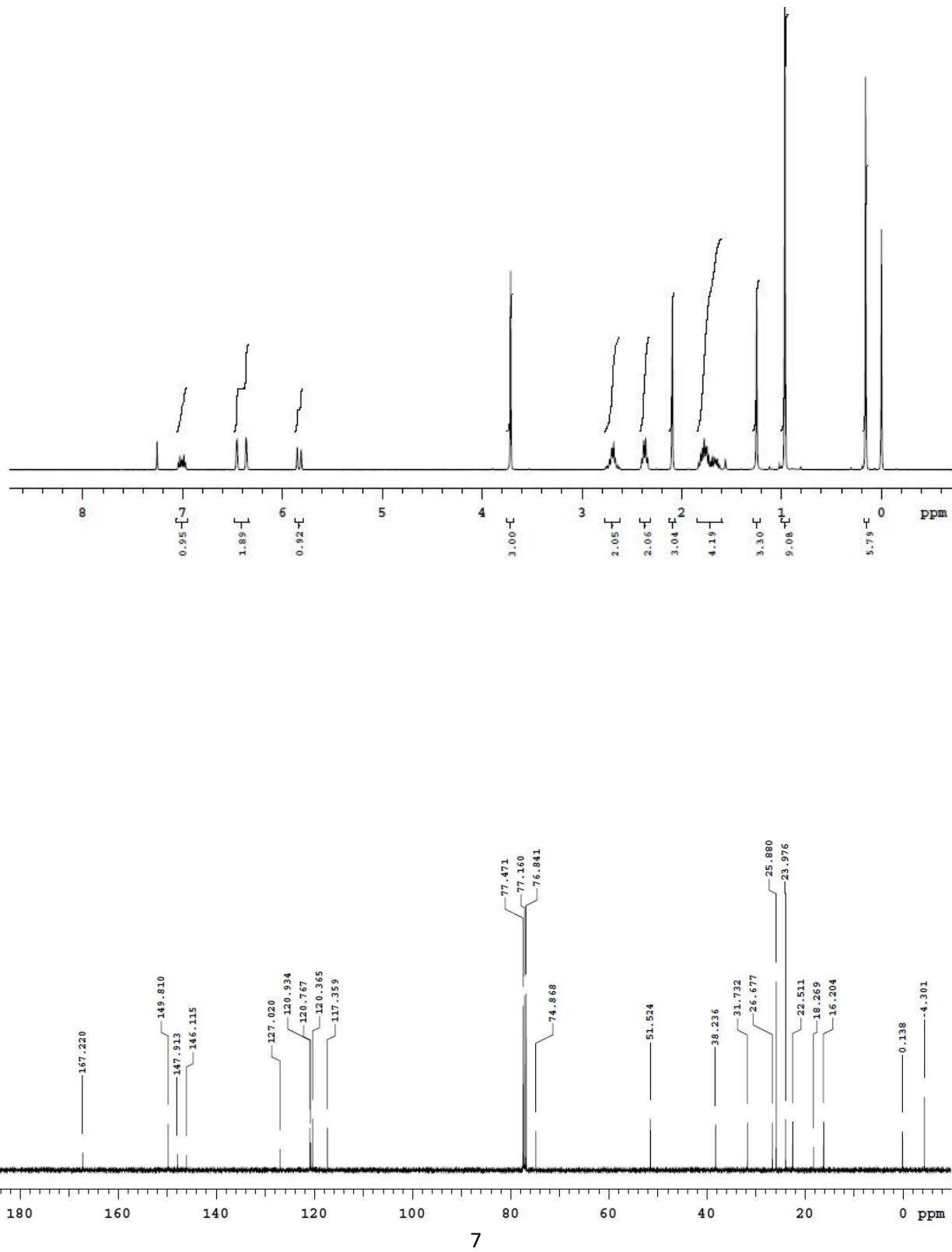
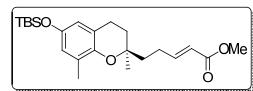
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 7a



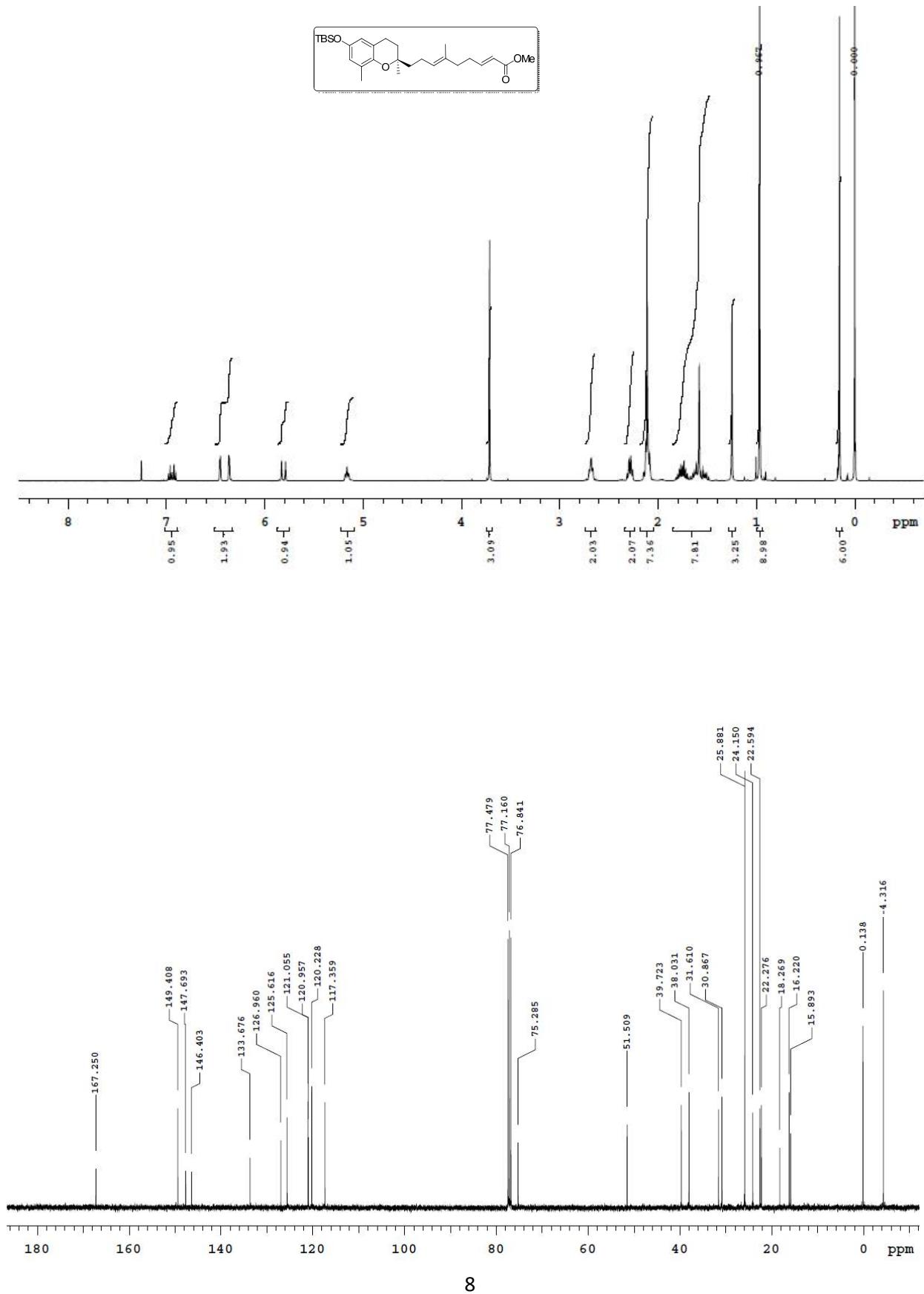
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 8a



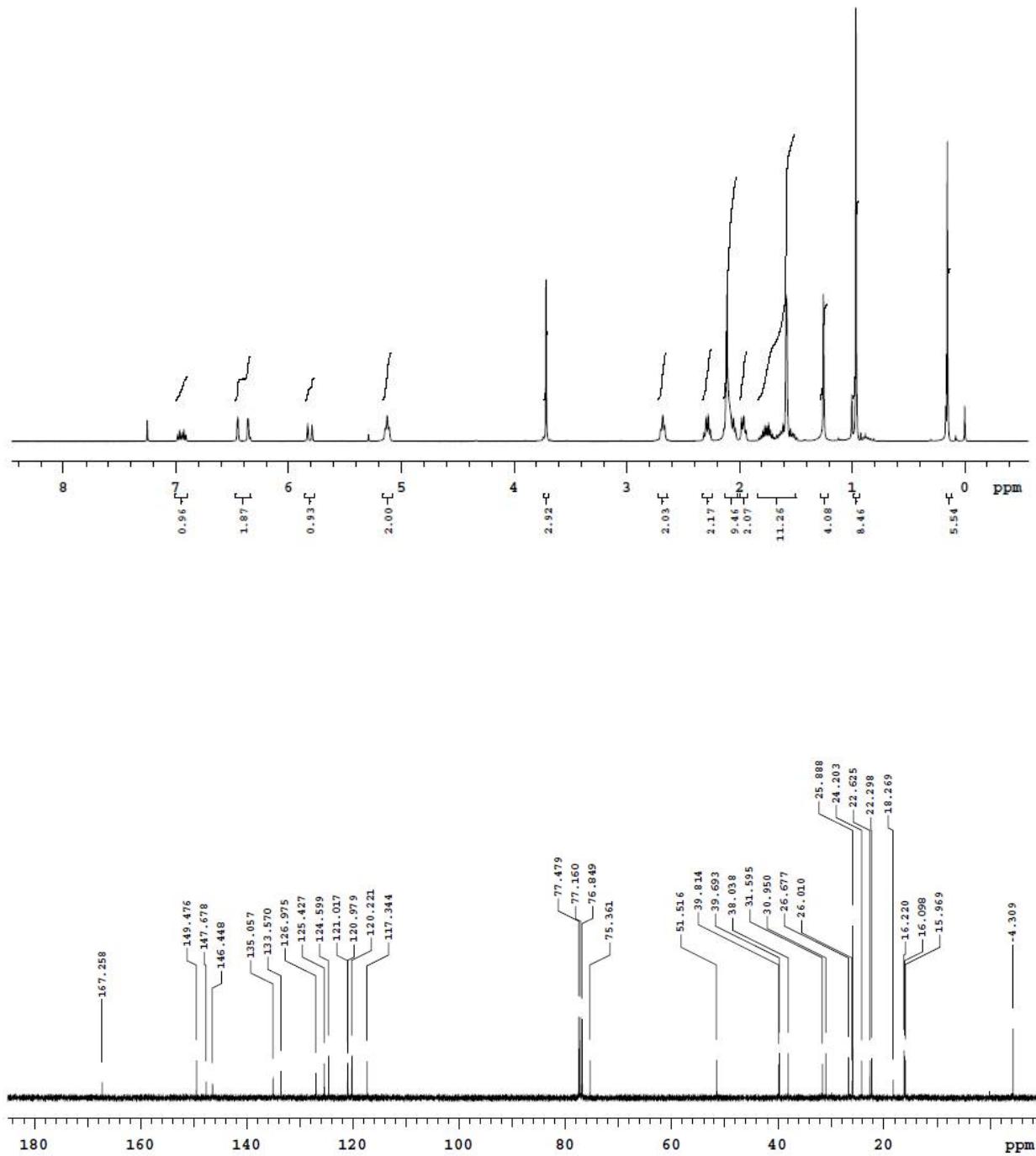
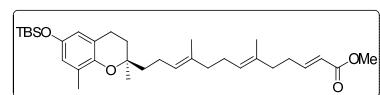
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 6b



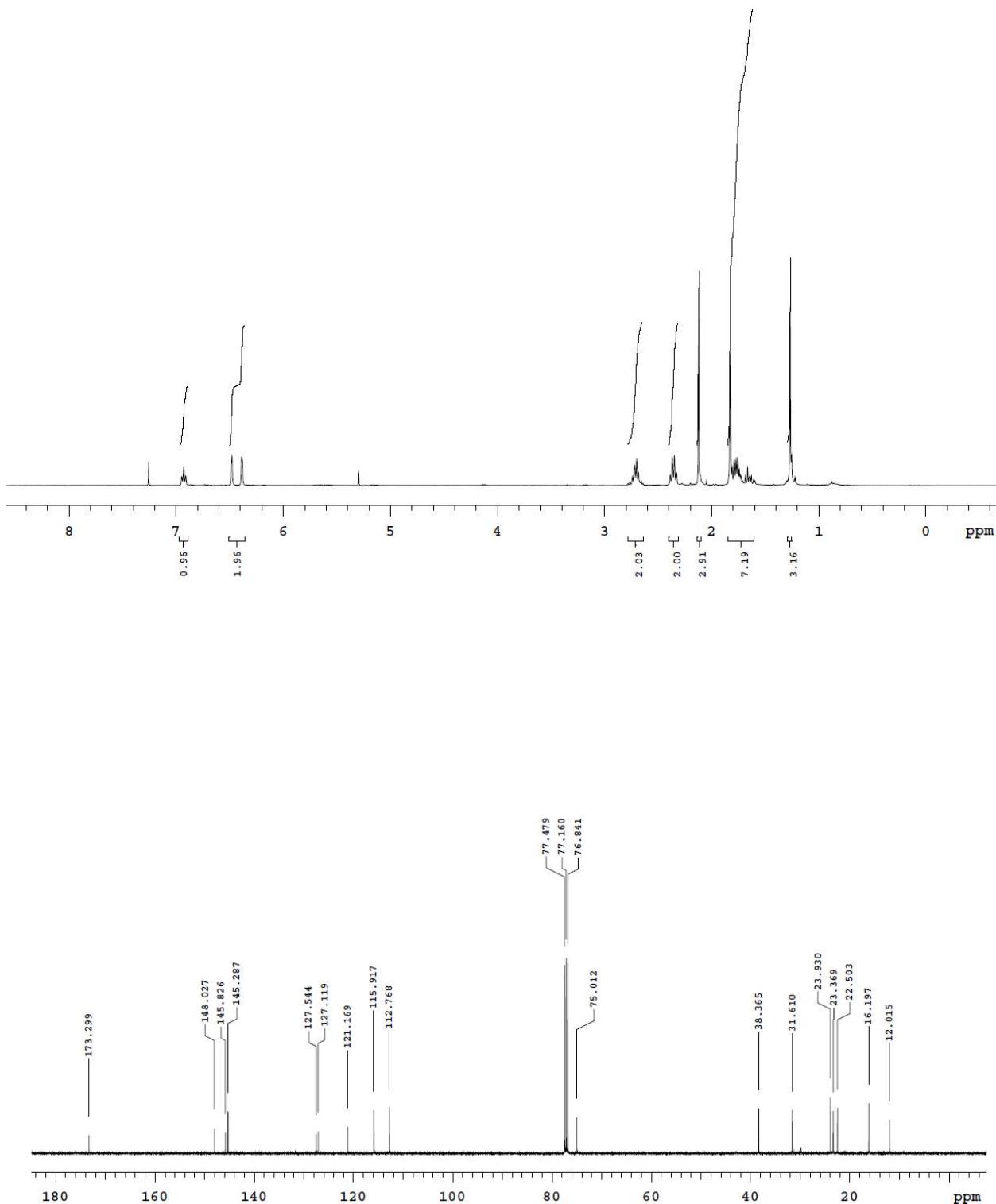
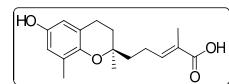
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 7b



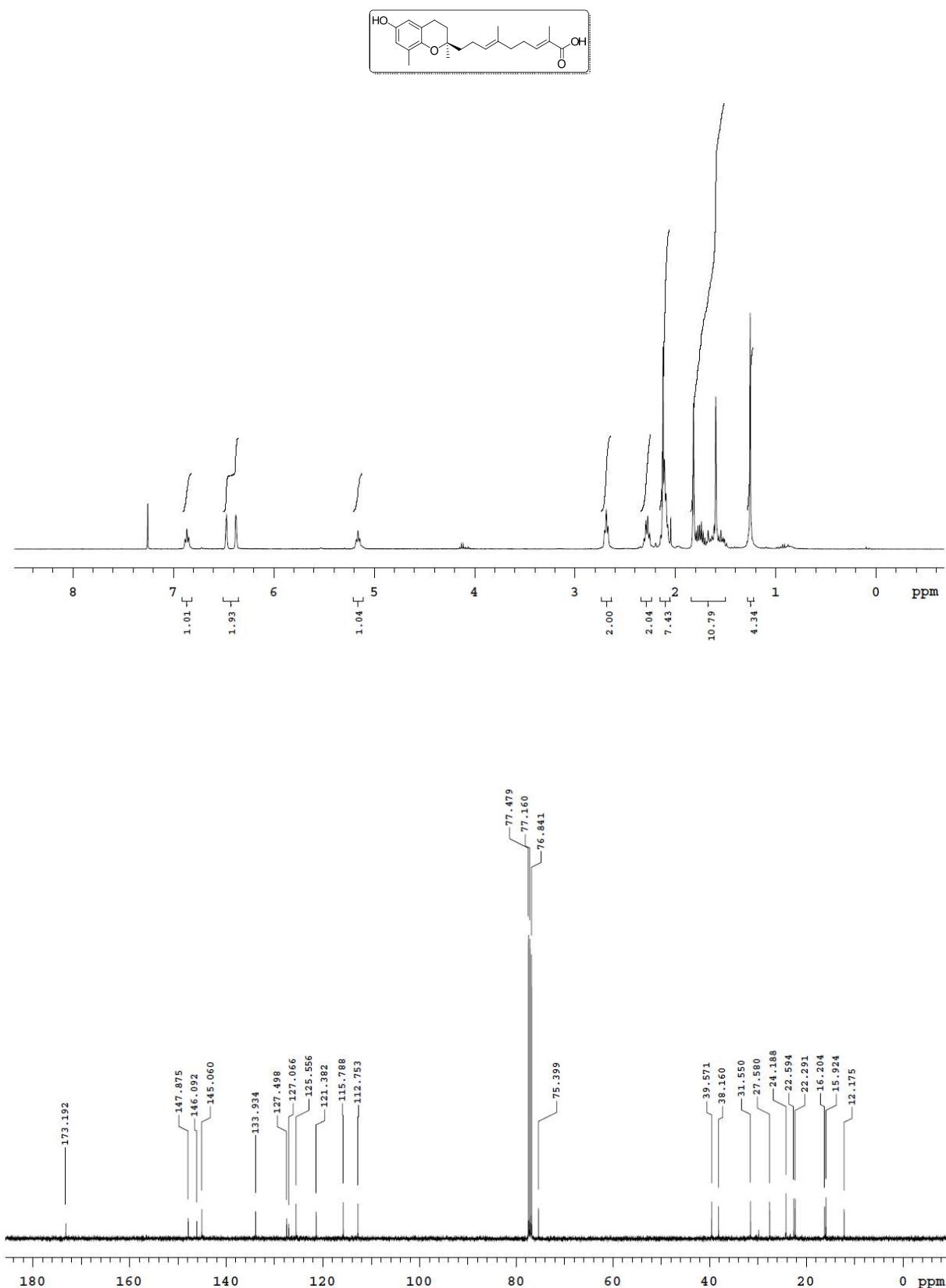
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 8b



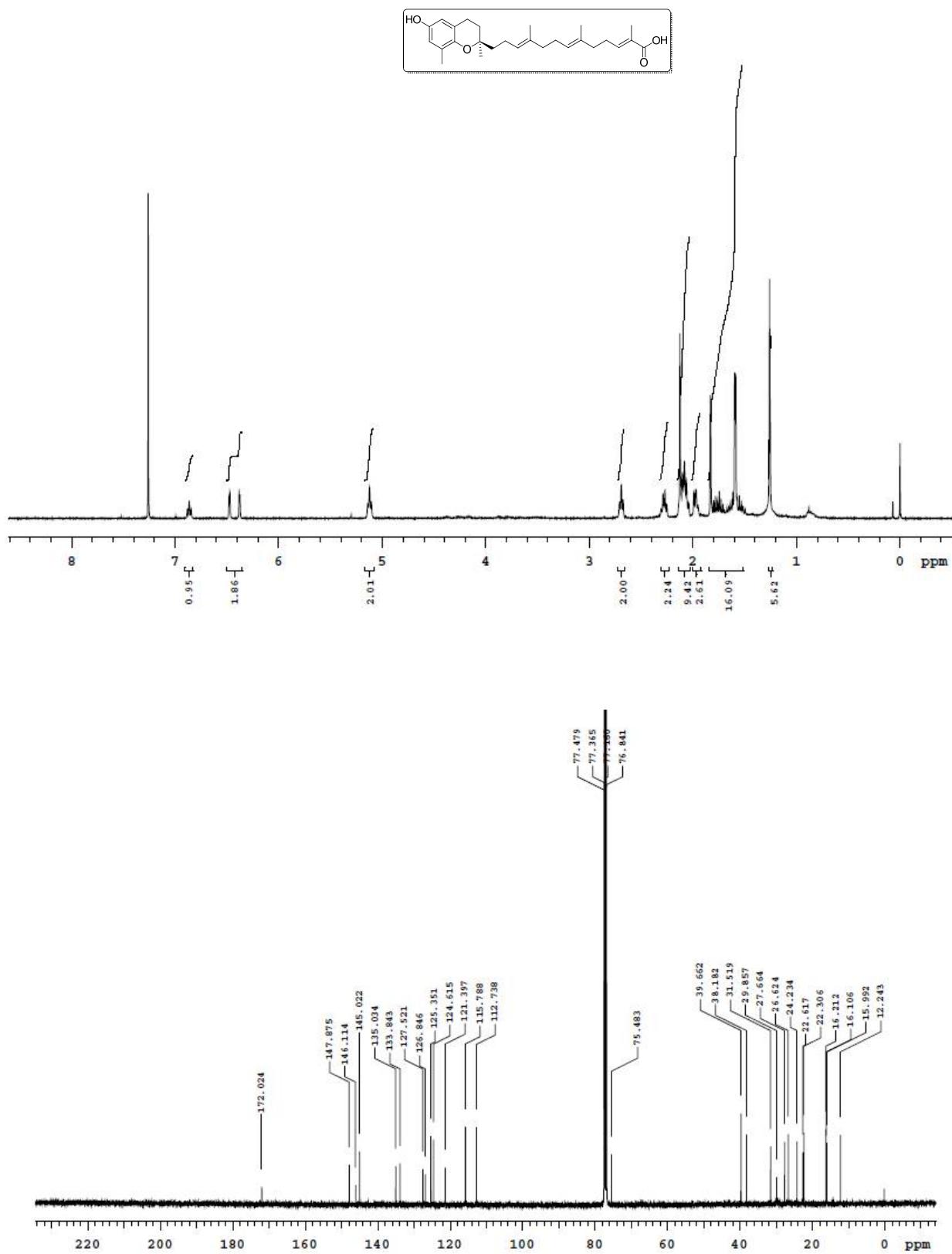
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 9a



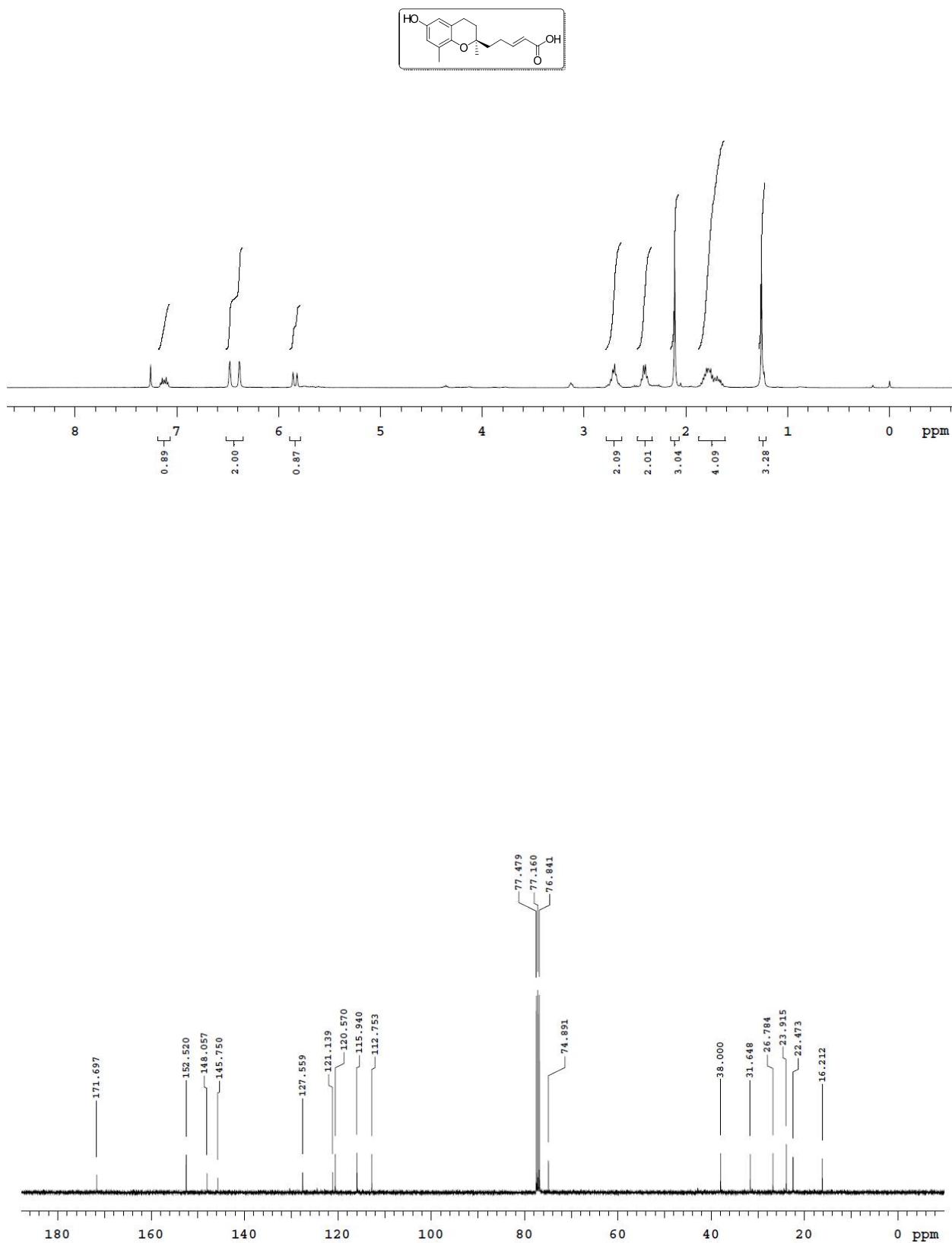
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 10a



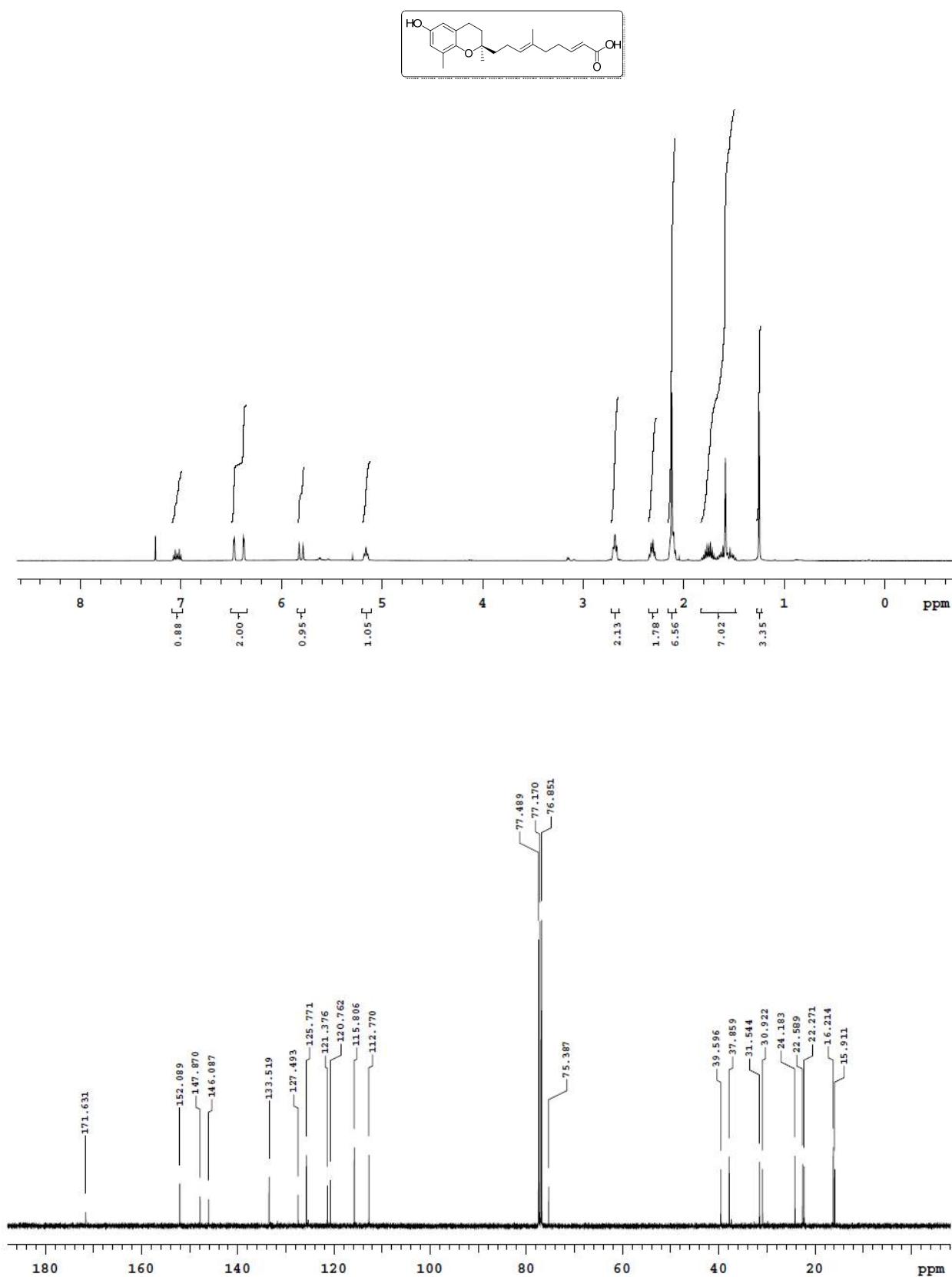
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 1



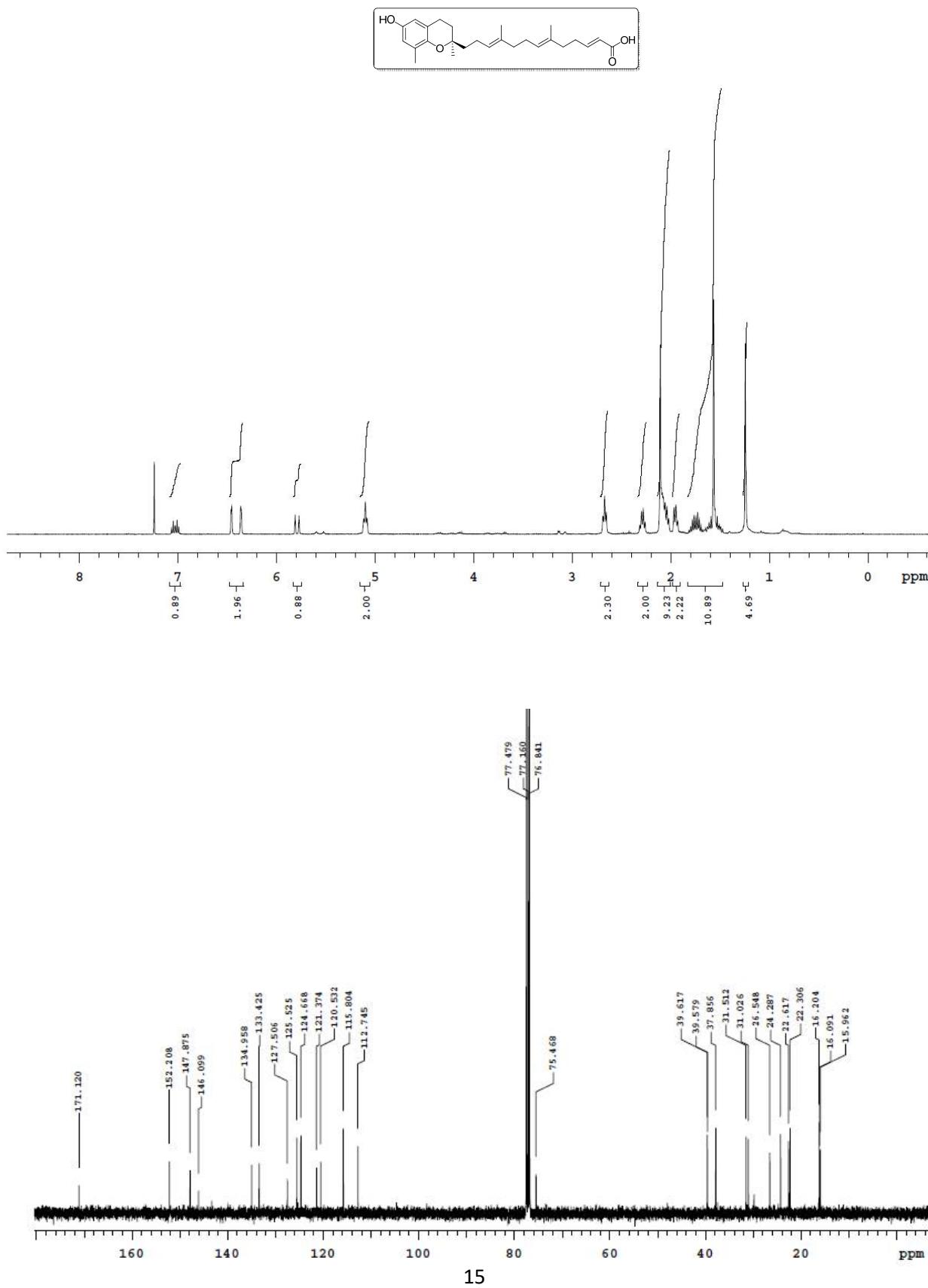
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 9b



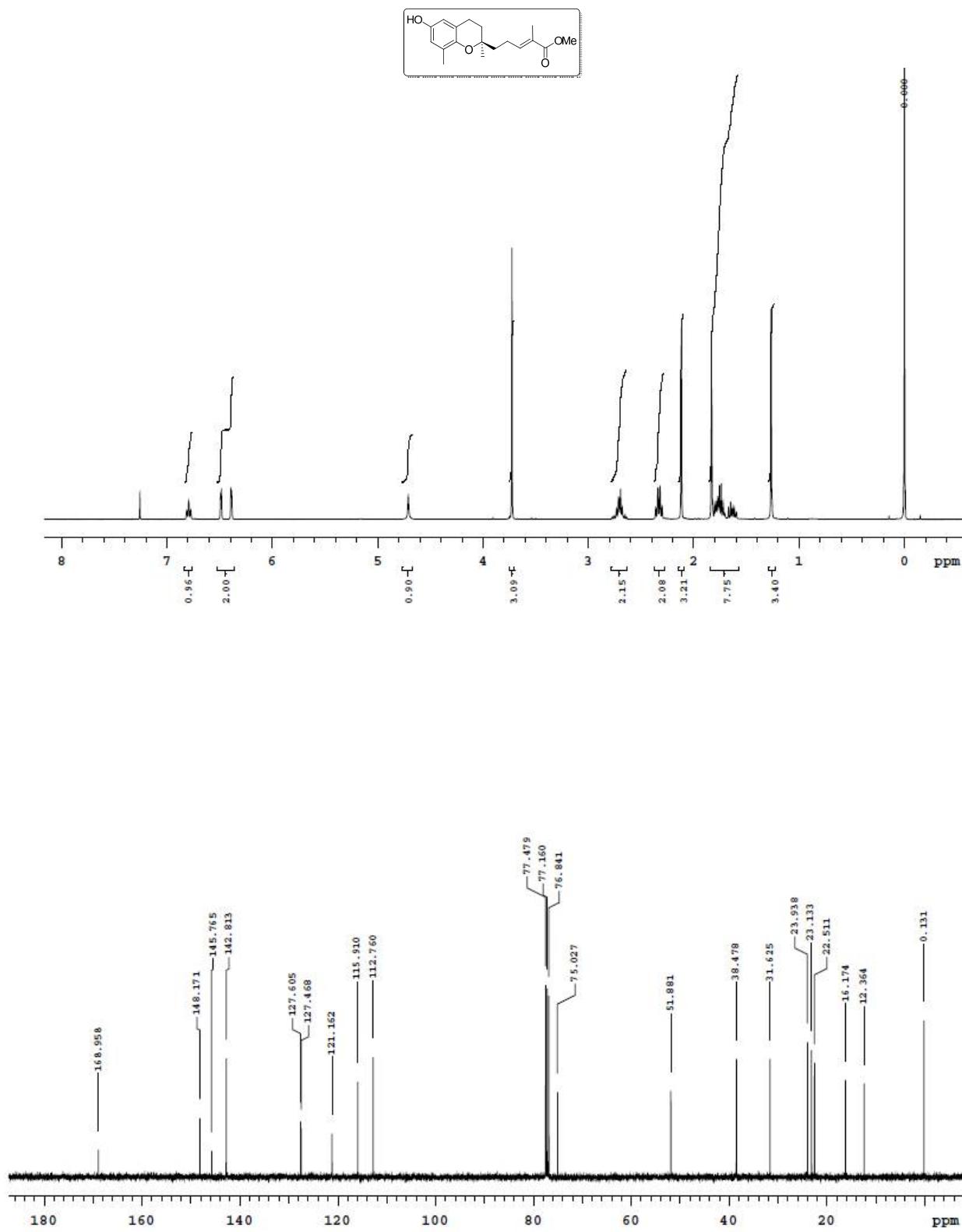
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 10b



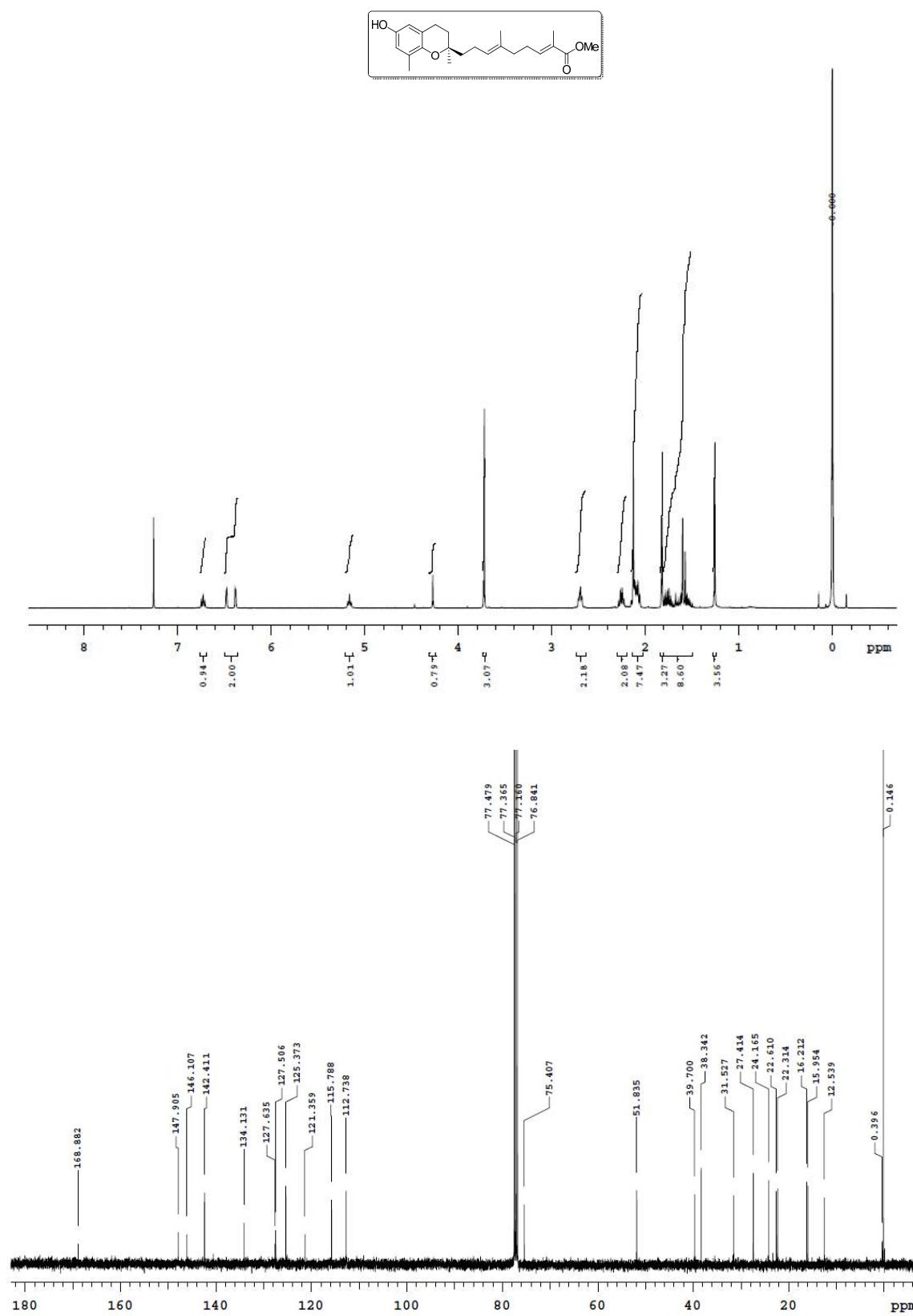
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 11



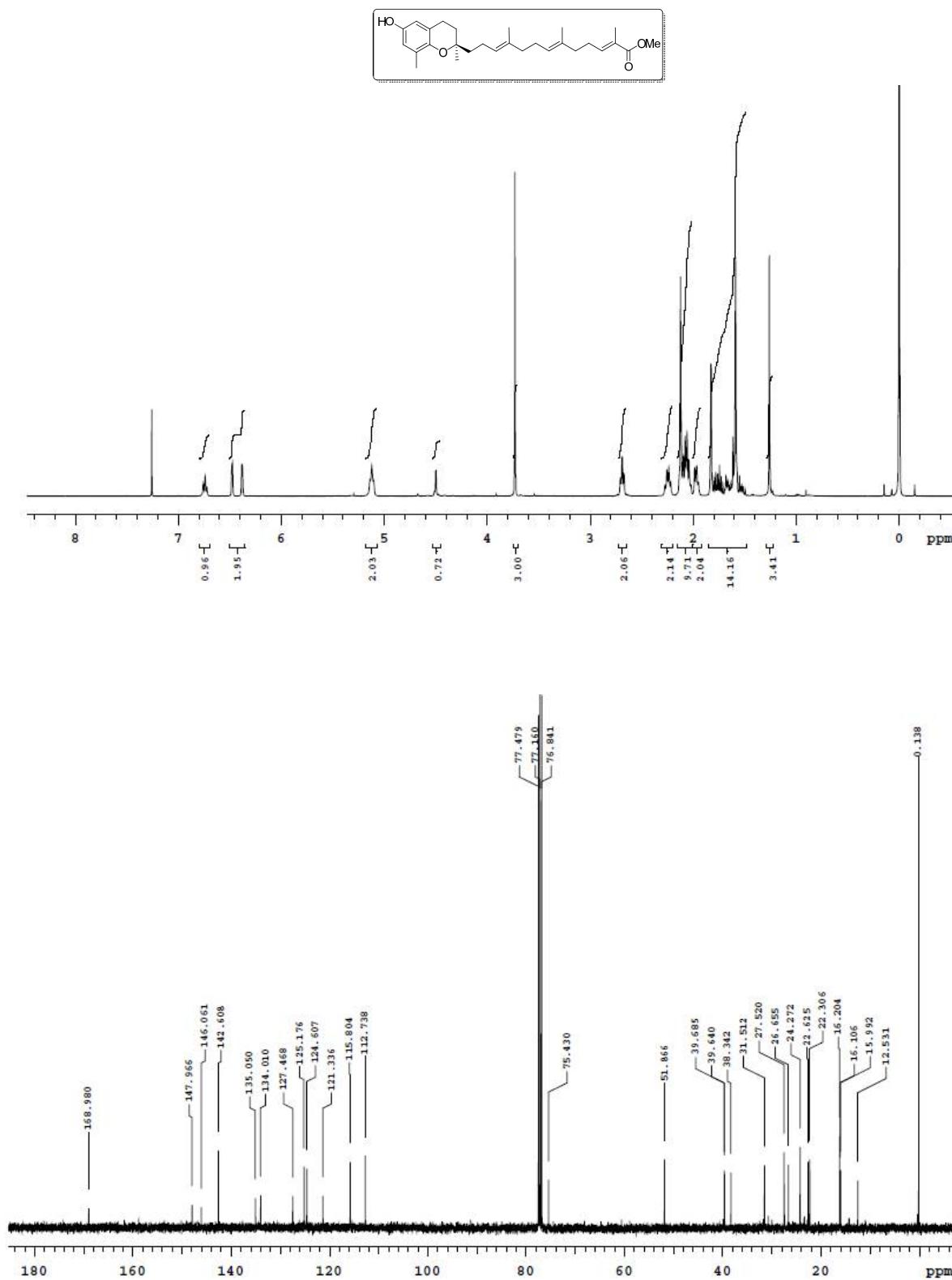
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 12a



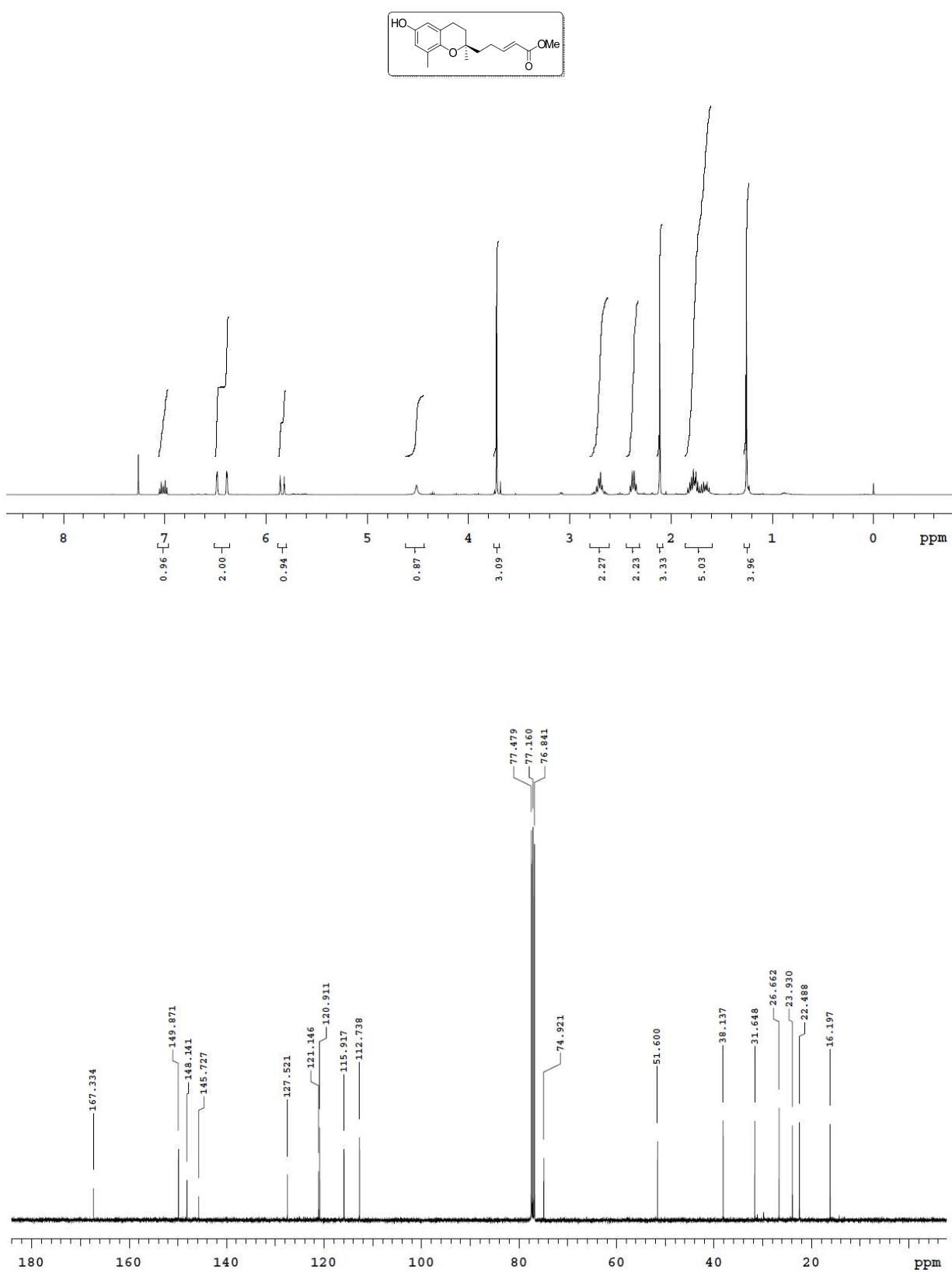
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 13a



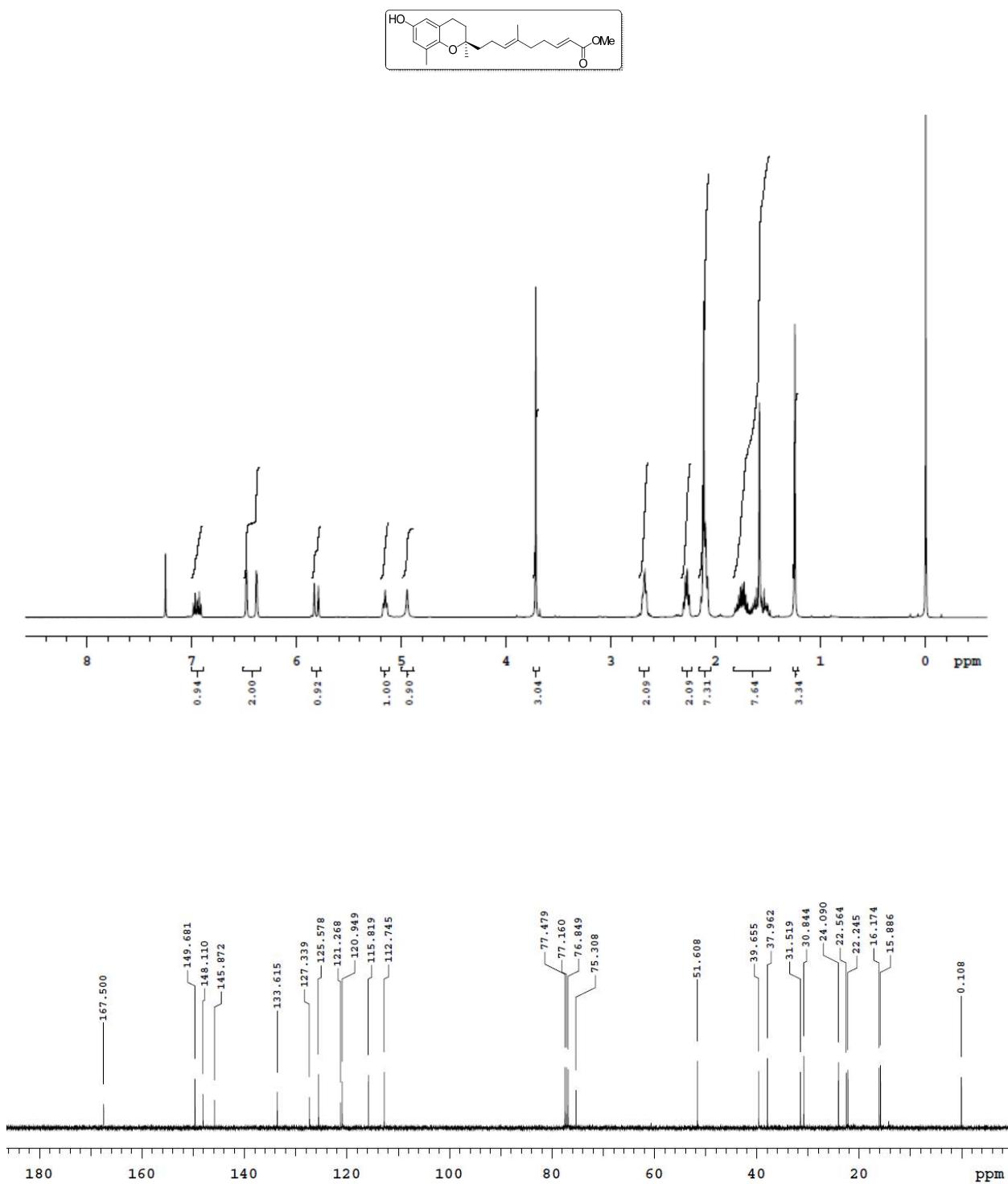
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 14a



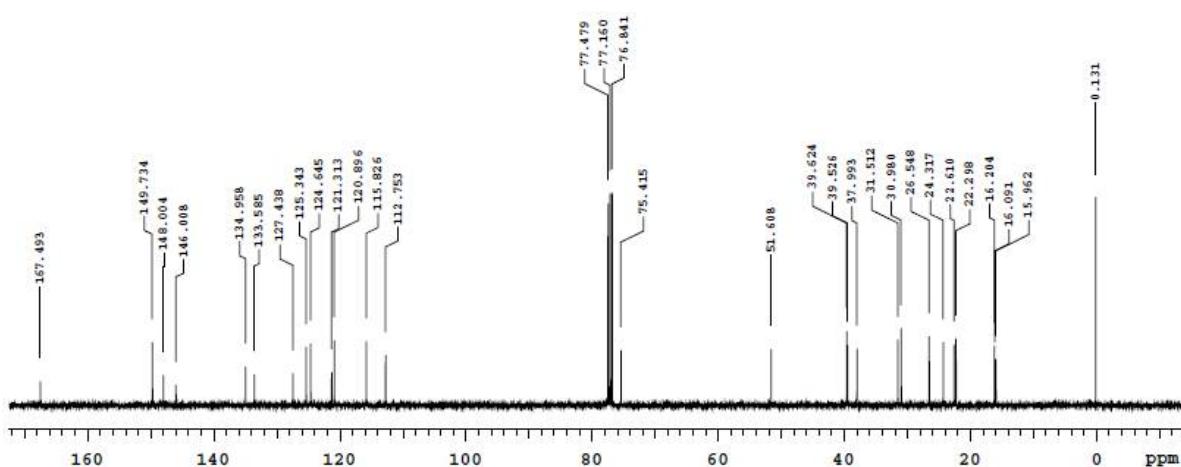
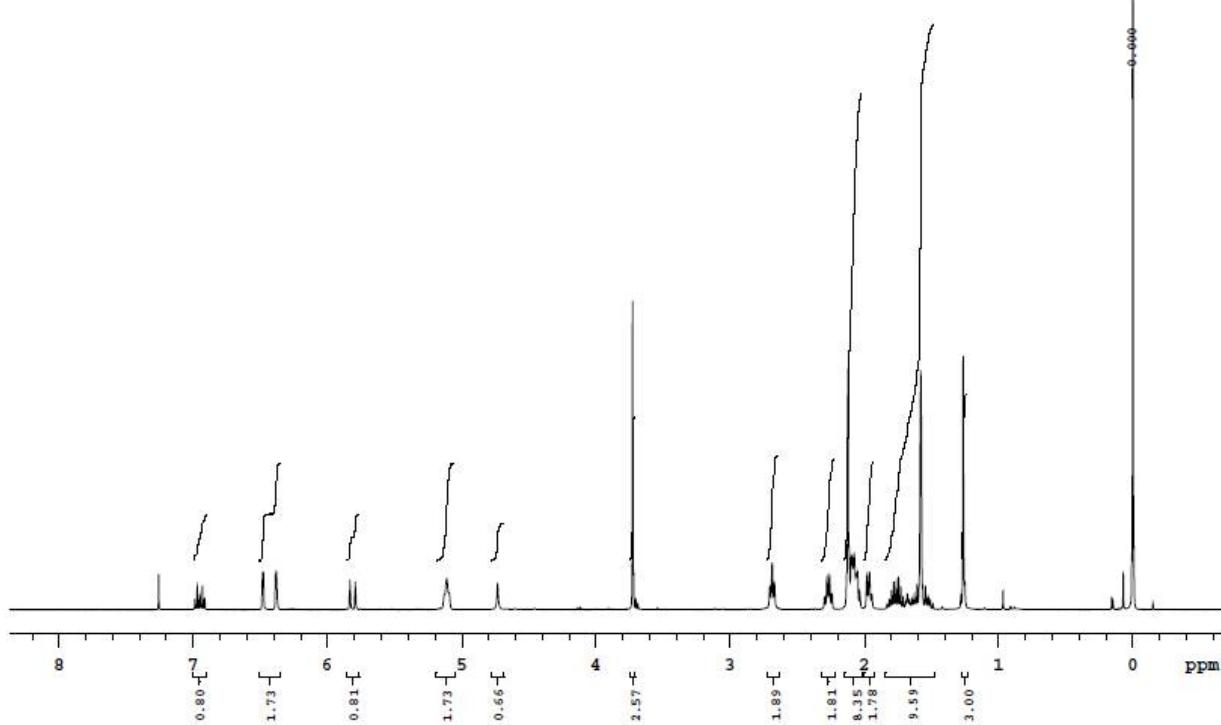
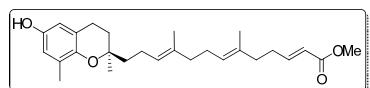
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 12b



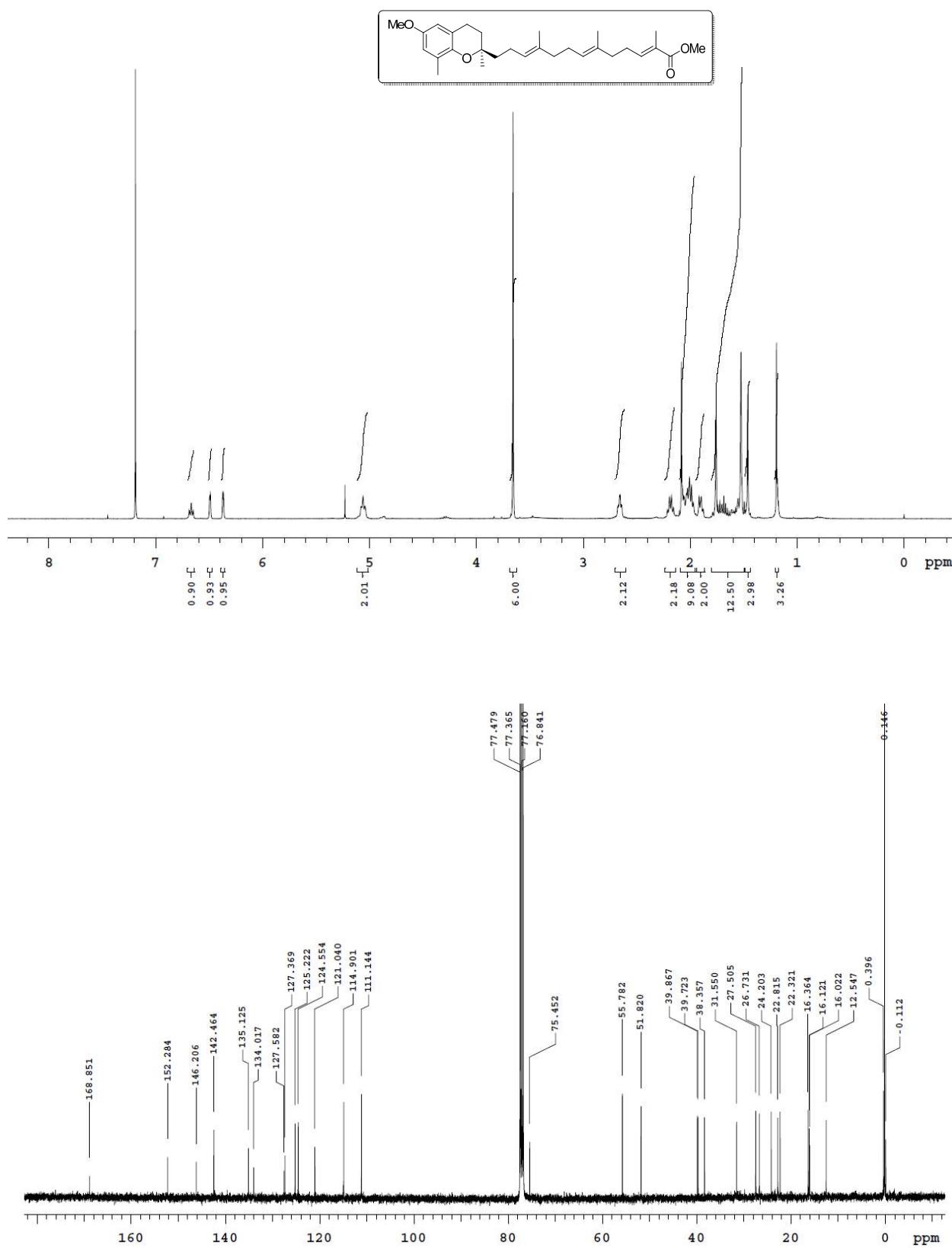
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 13b



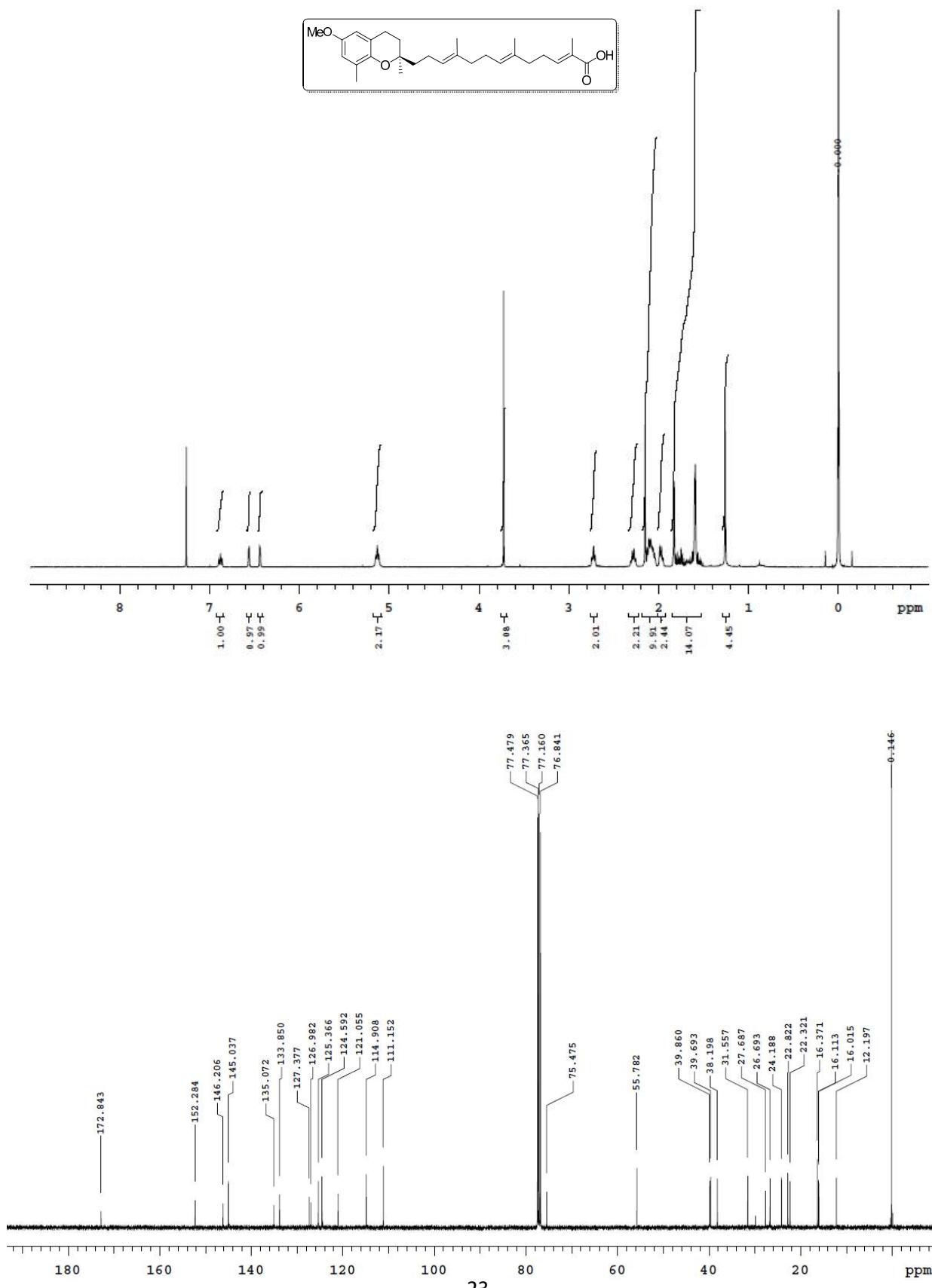
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 14b



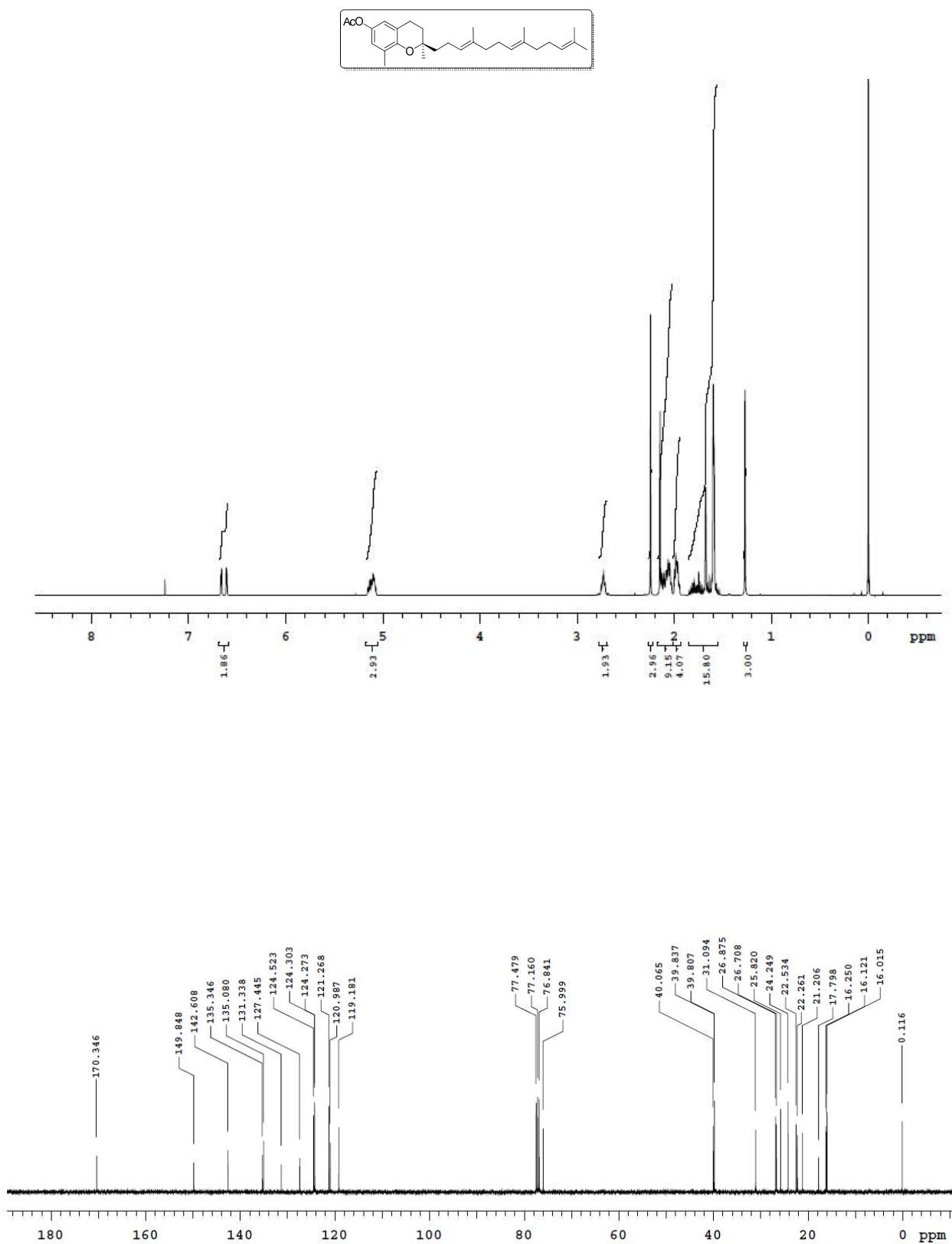
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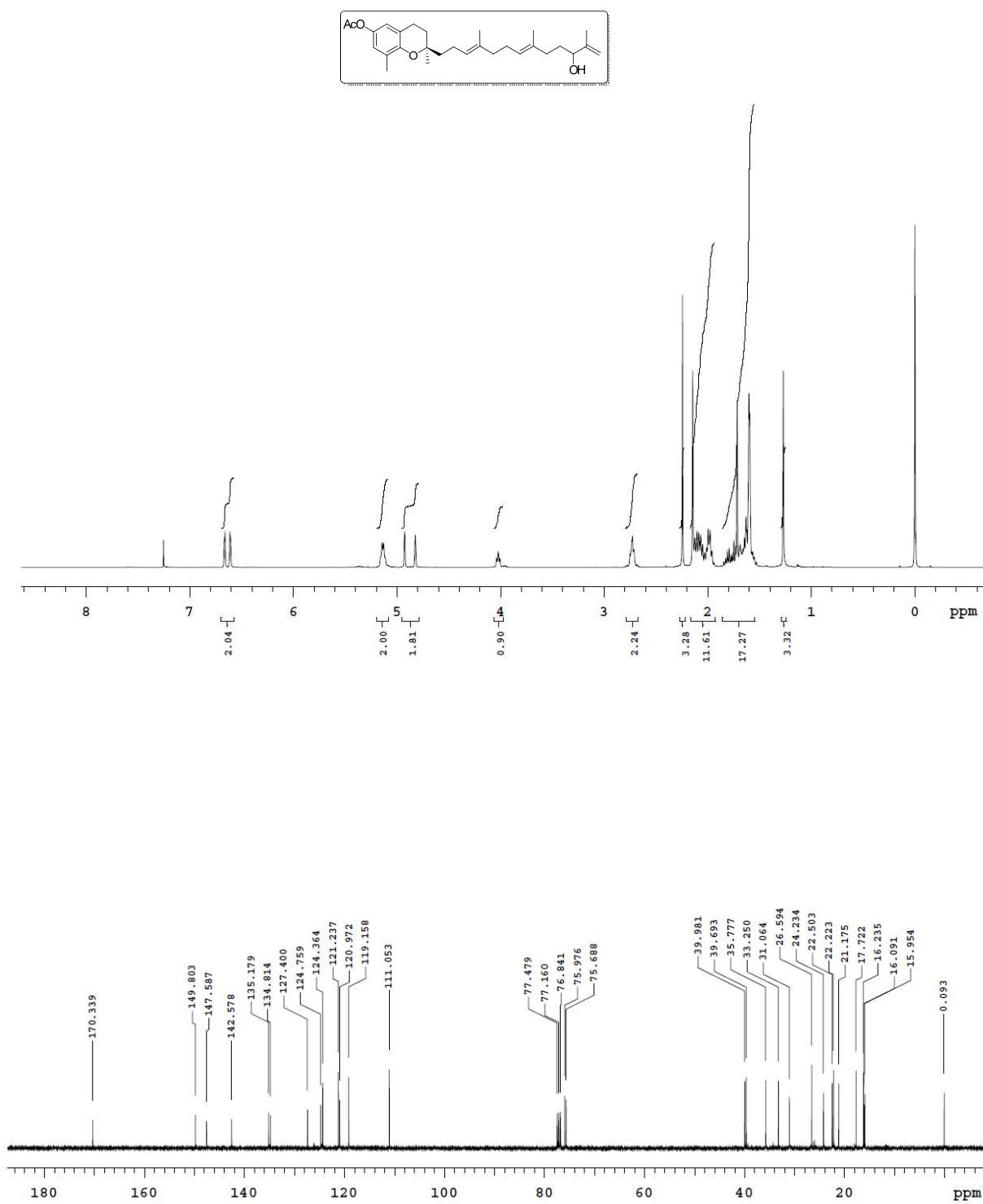
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 16



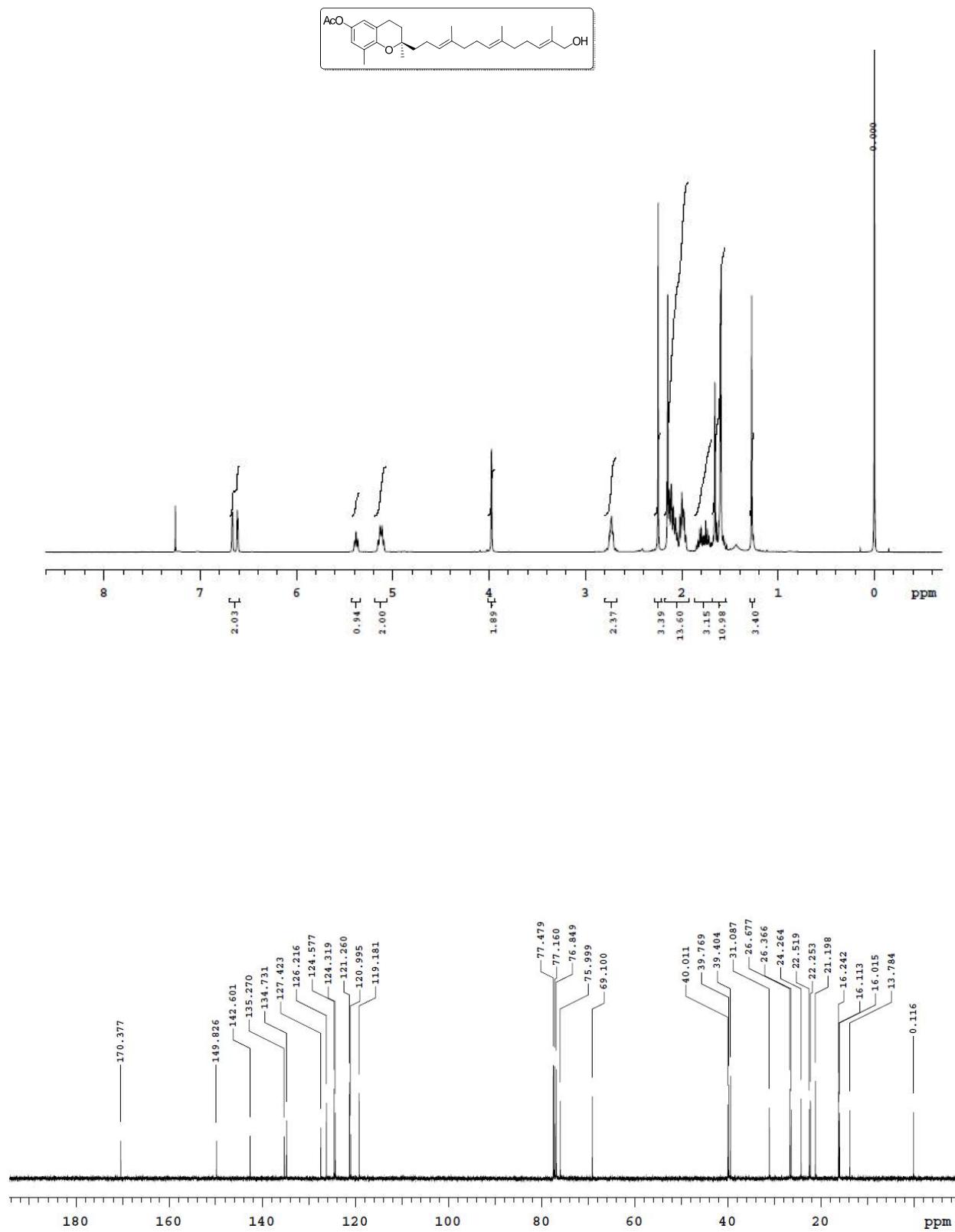
<sup>1</sup>H and <sup>13</sup>C NMR spectra of 17



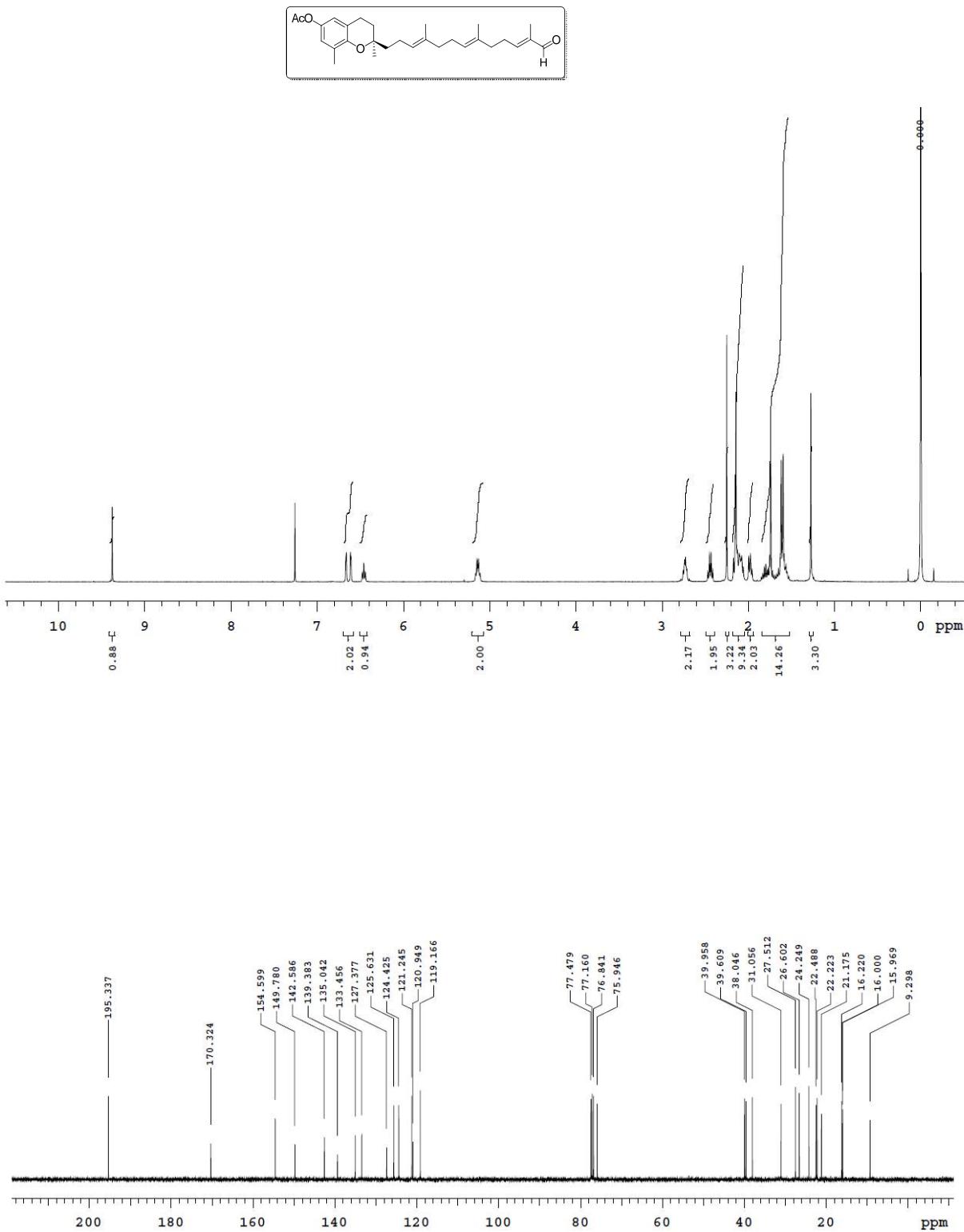
### <sup>1</sup>H and <sup>13</sup>C NMR spectra of 19



## <sup>1</sup>H and <sup>13</sup>C NMR spectra of 20



<sup>1</sup>H and <sup>13</sup>C NMR spectrum of 21



<sup>1</sup>H and <sup>13</sup>C NMR spectrum of 22

