

## Supplementary Material

### Two simple and alternative approaches for the synthesis of anticancer active goniotalamin

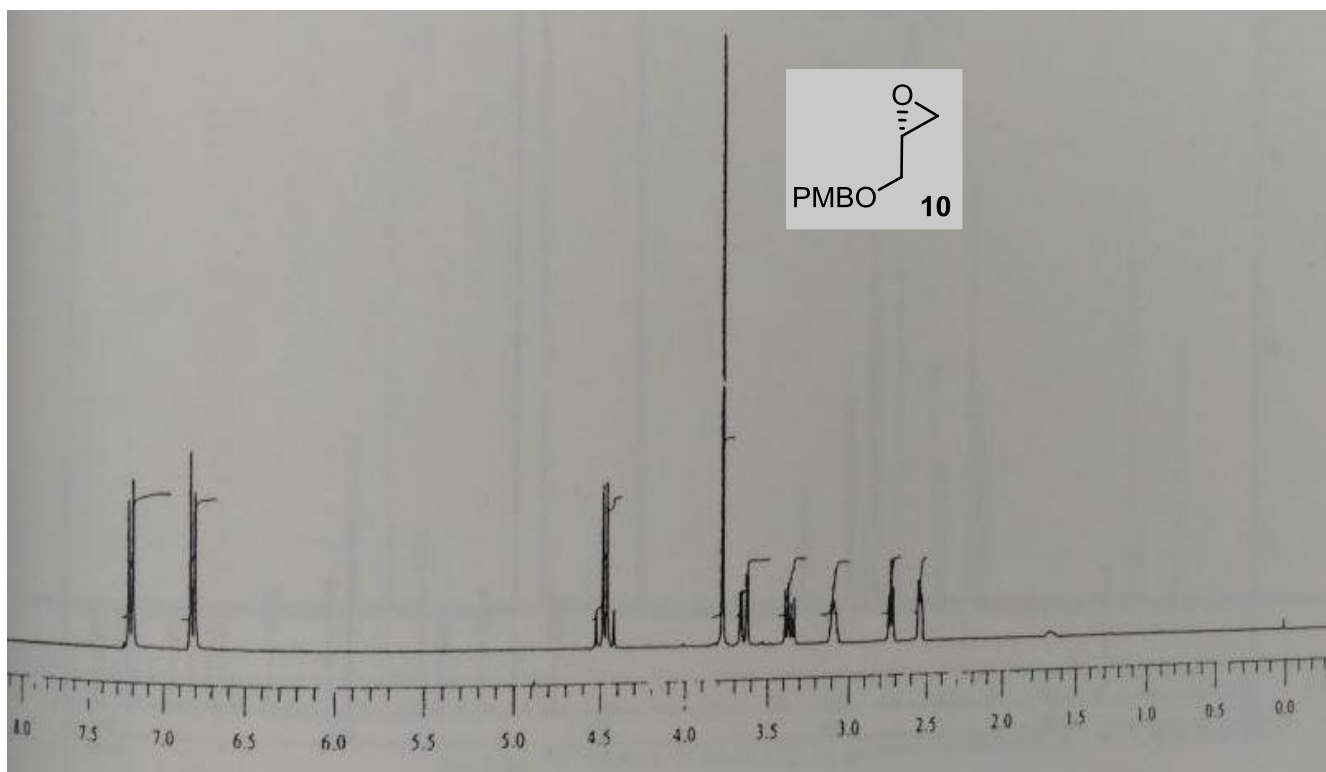
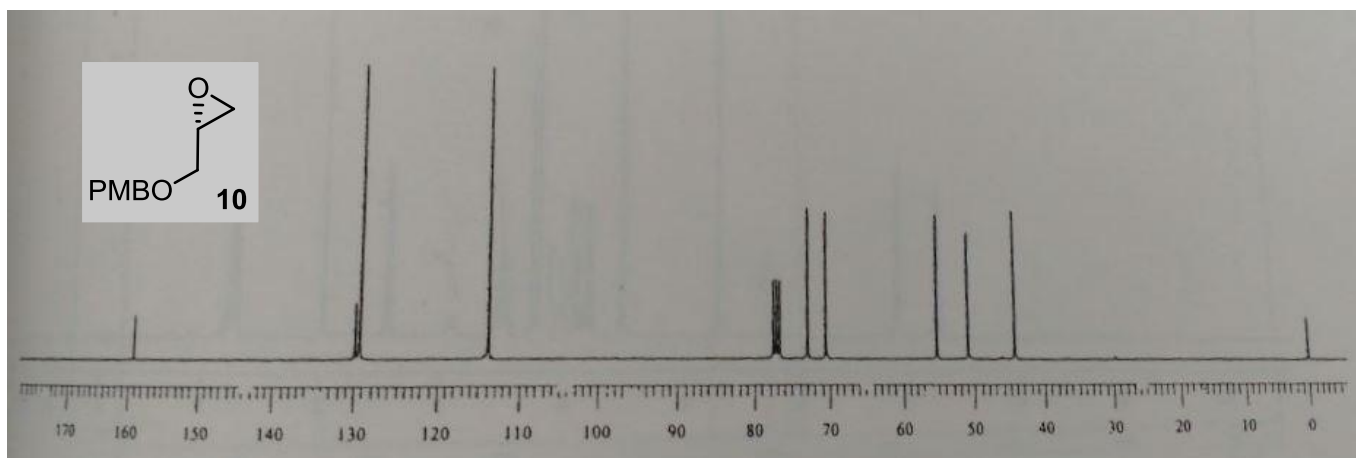
Manchala Narasimhulu,<sup>\*a</sup> S. Siva Prasad,<sup>a</sup> Rama Moorthy Appa,<sup>a</sup> Jangam Lakshmidivi,<sup>a</sup> and Katta Venkateswarlu<sup>\*a</sup>

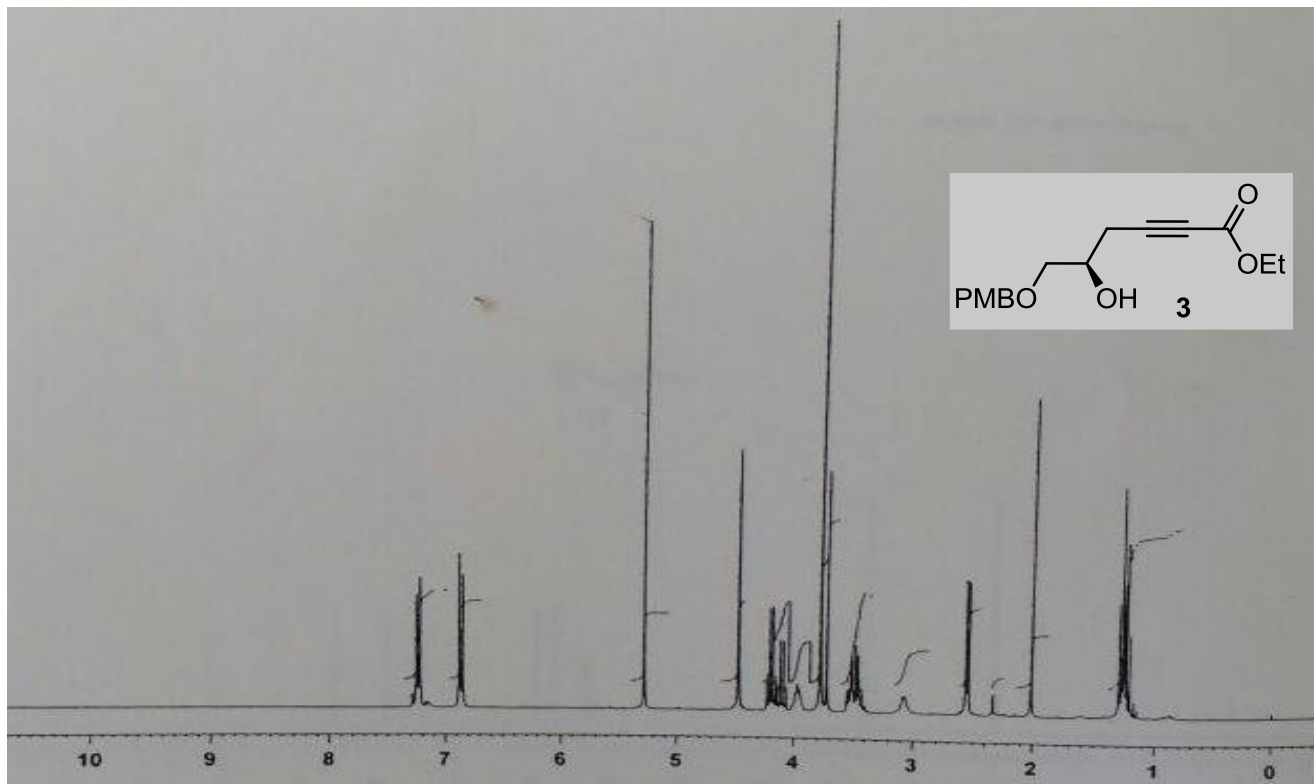
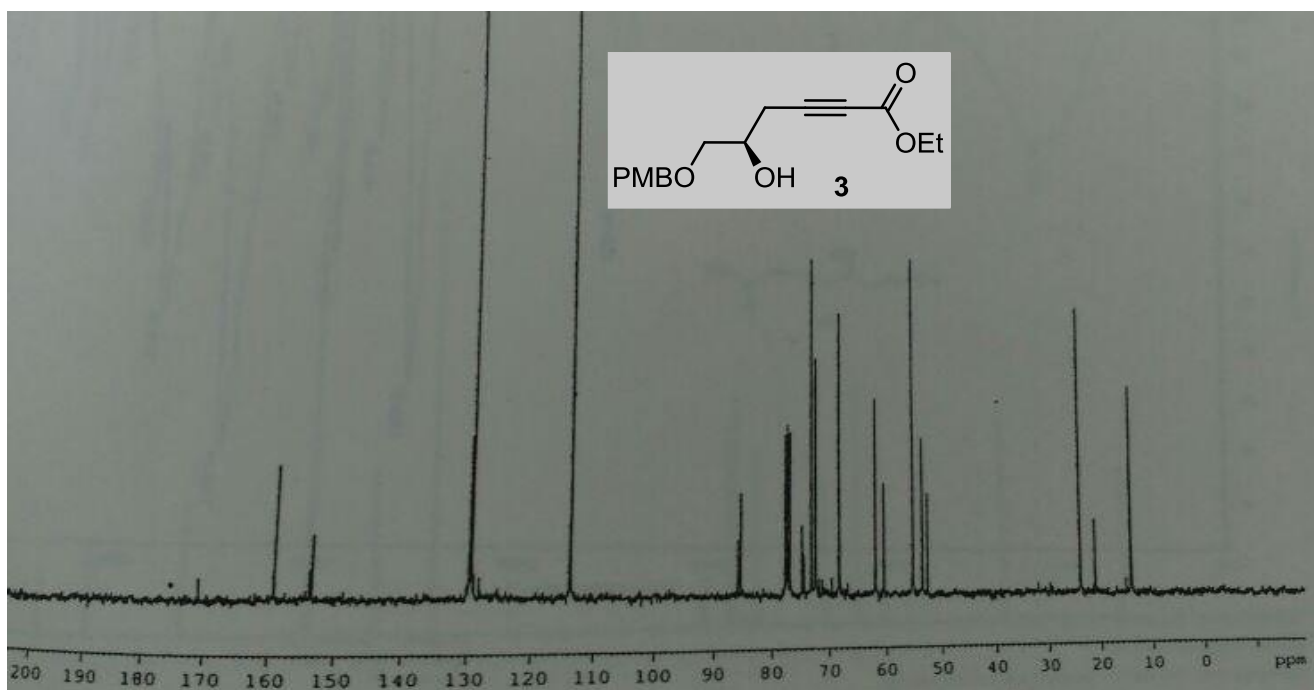
<sup>a</sup>Laboratory for Synthetic and Natural Products Chemistry, Department of Chemistry, Yogi Vemana University, Kadapa 516003, India.

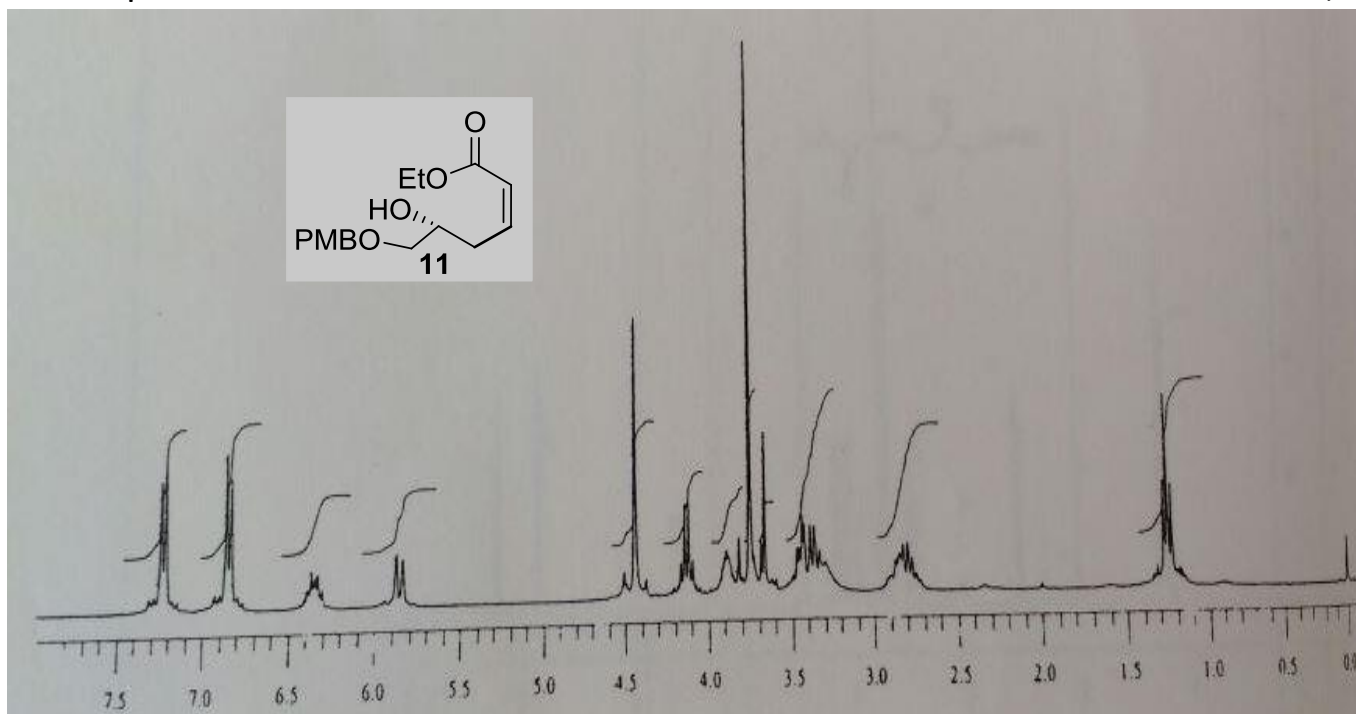
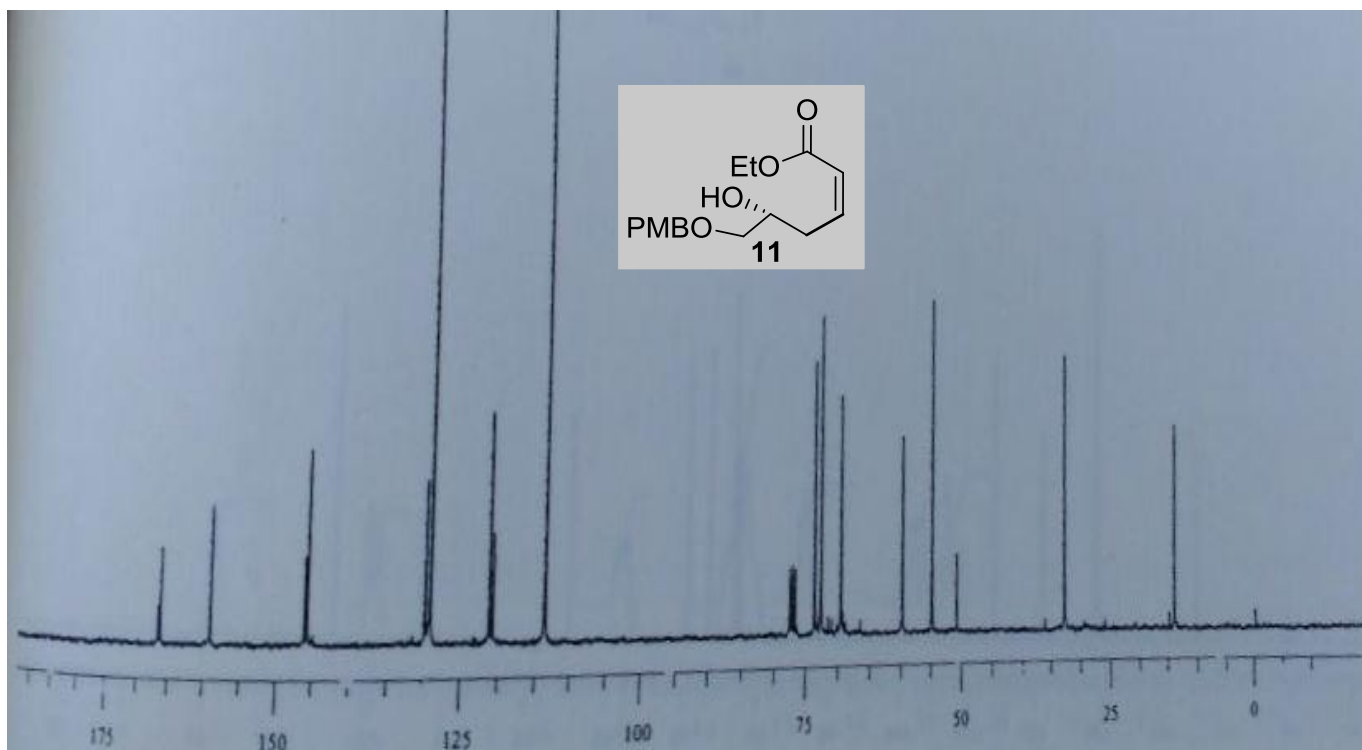
Email: [kvenkat@yogivemanauniversity.ac.in](mailto:kvenkat@yogivemanauniversity.ac.in)

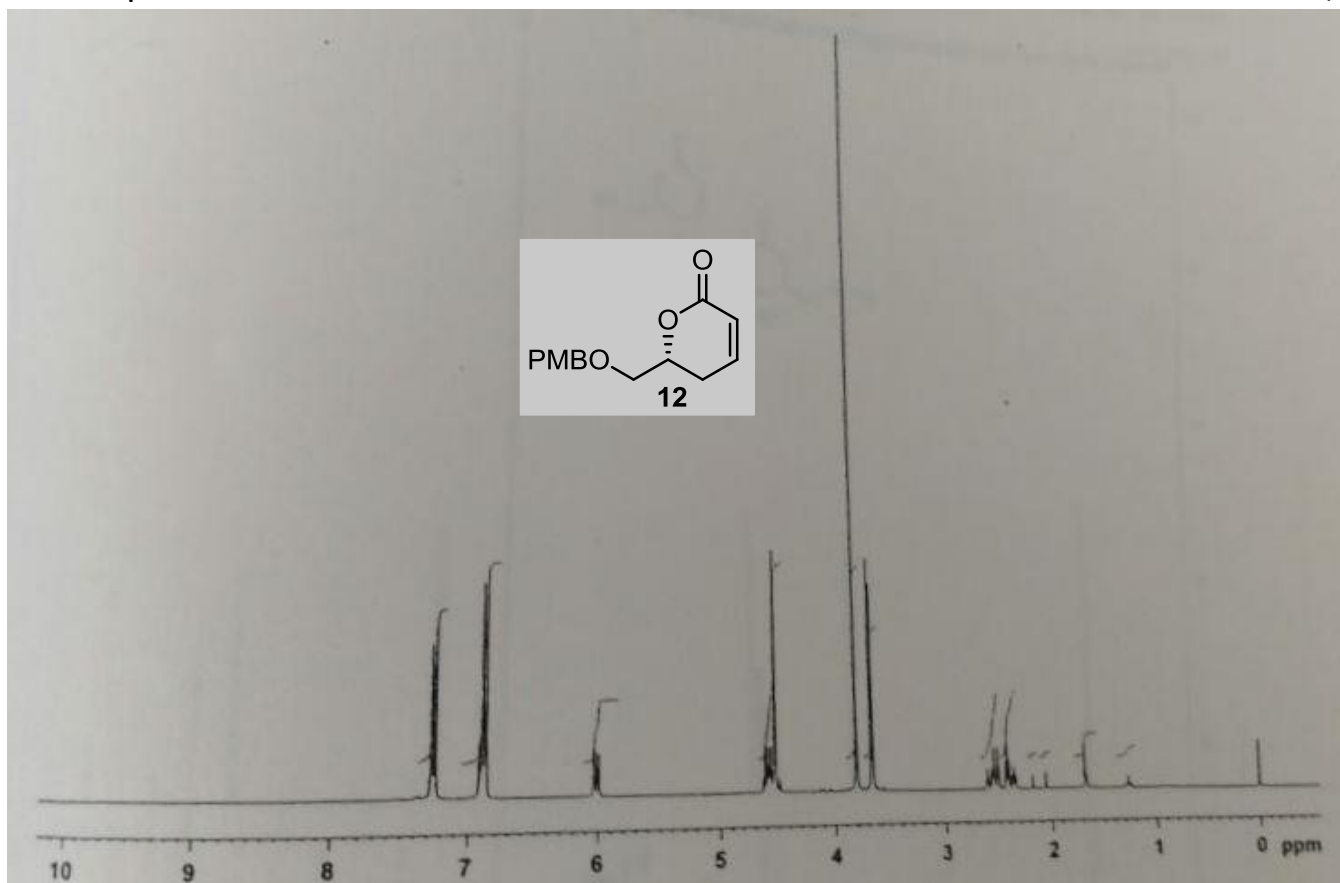
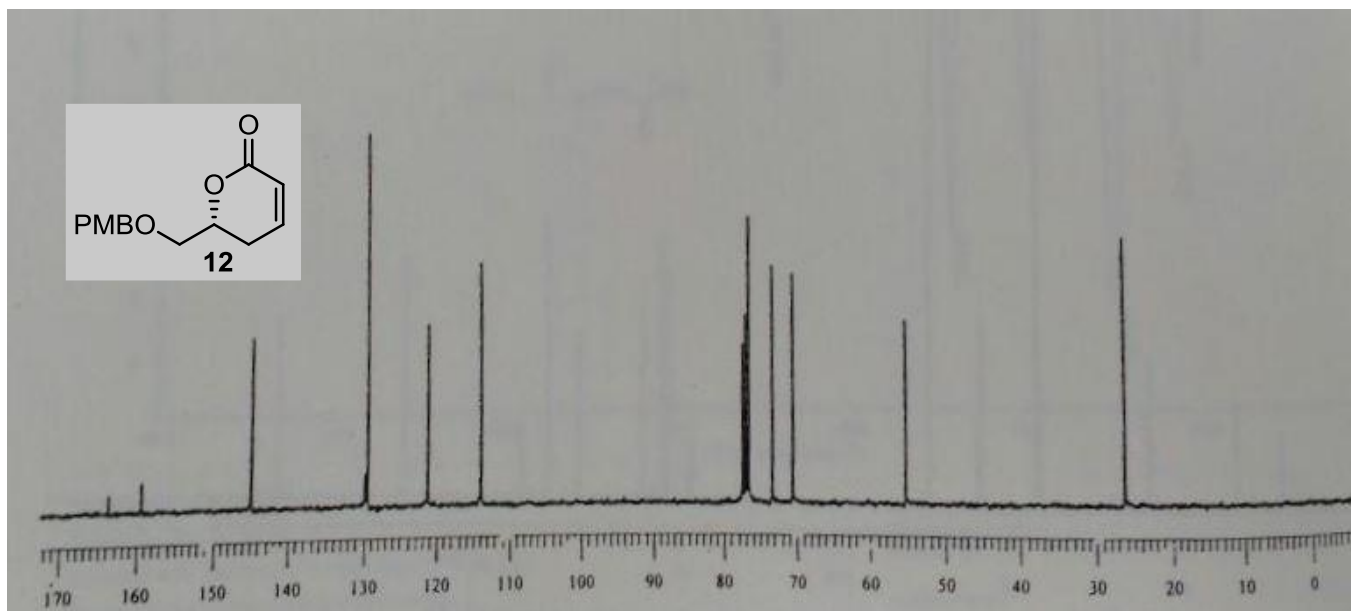
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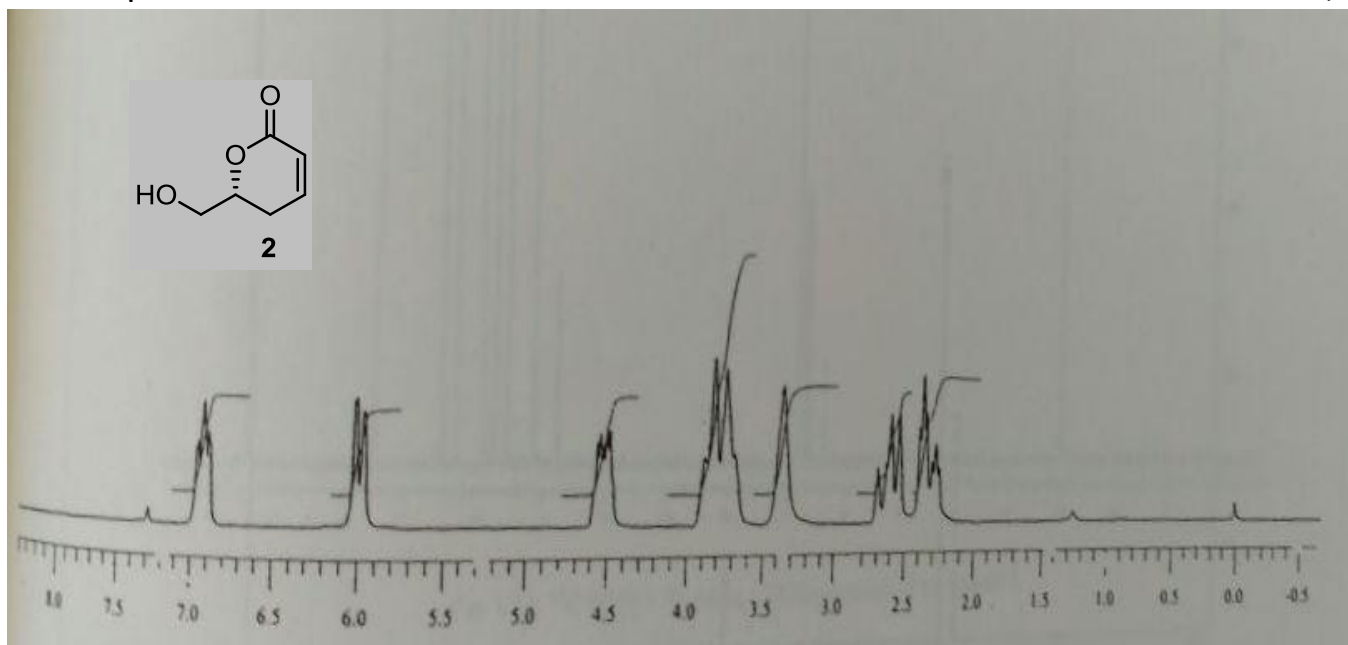
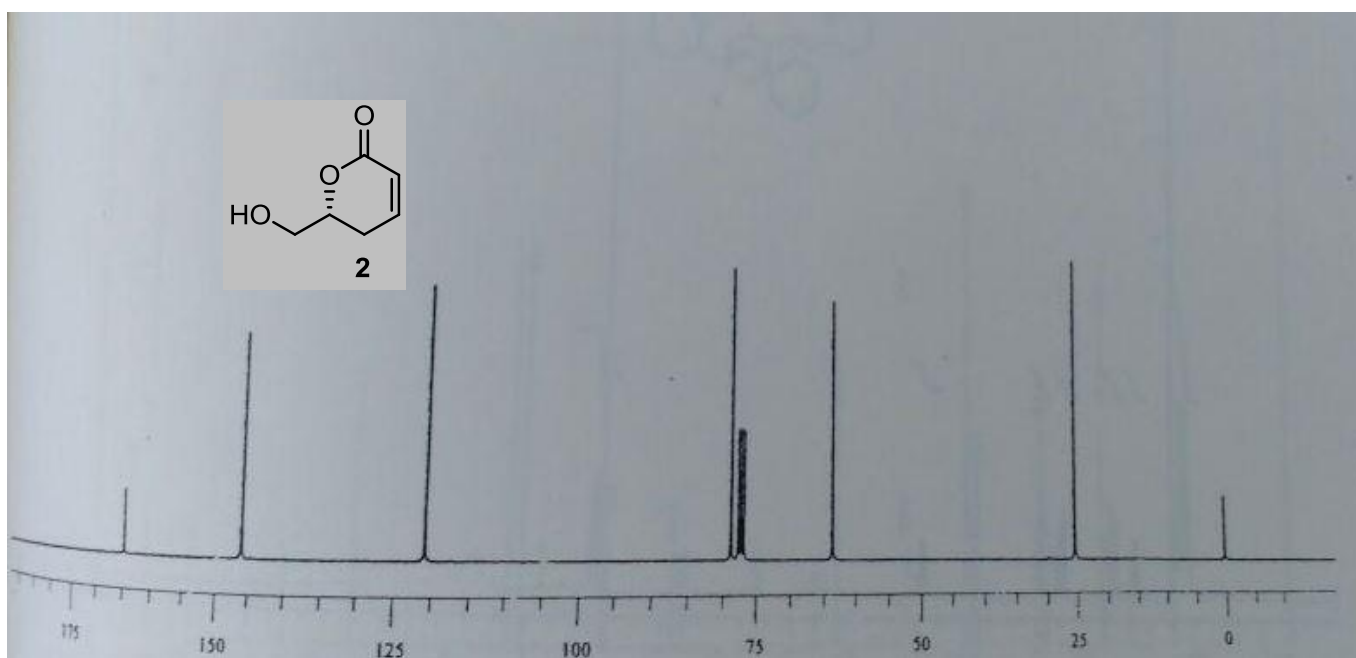
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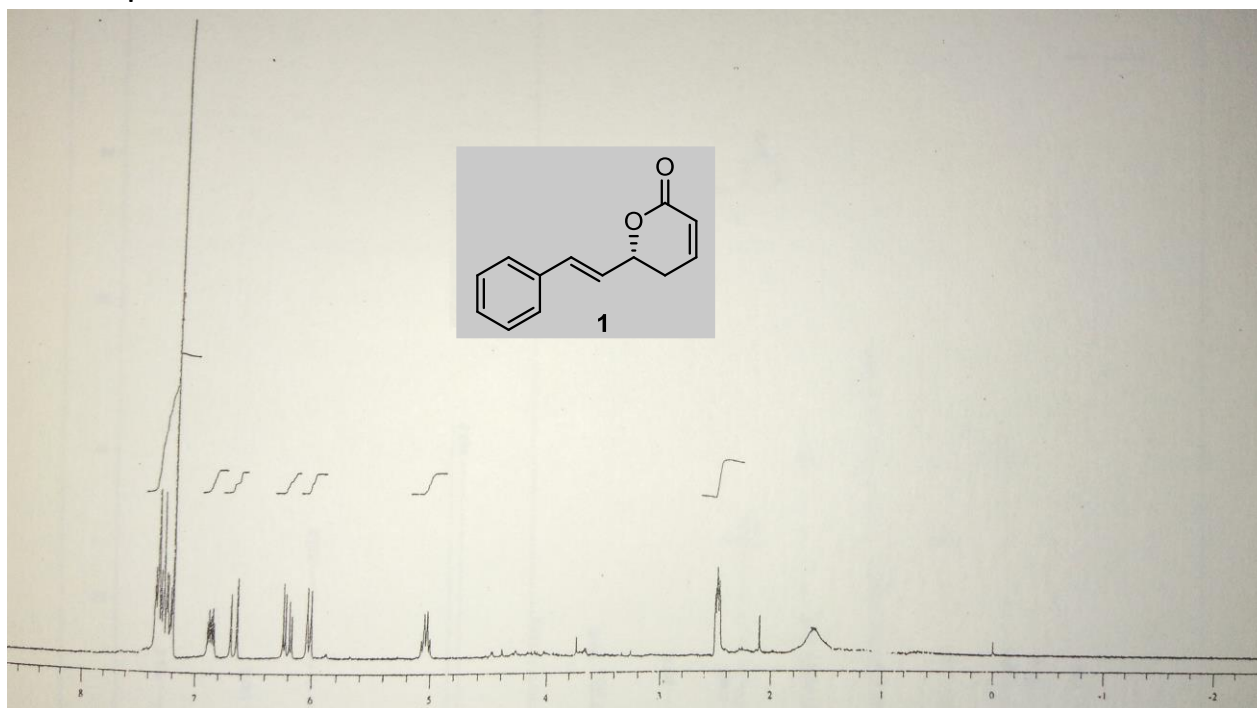
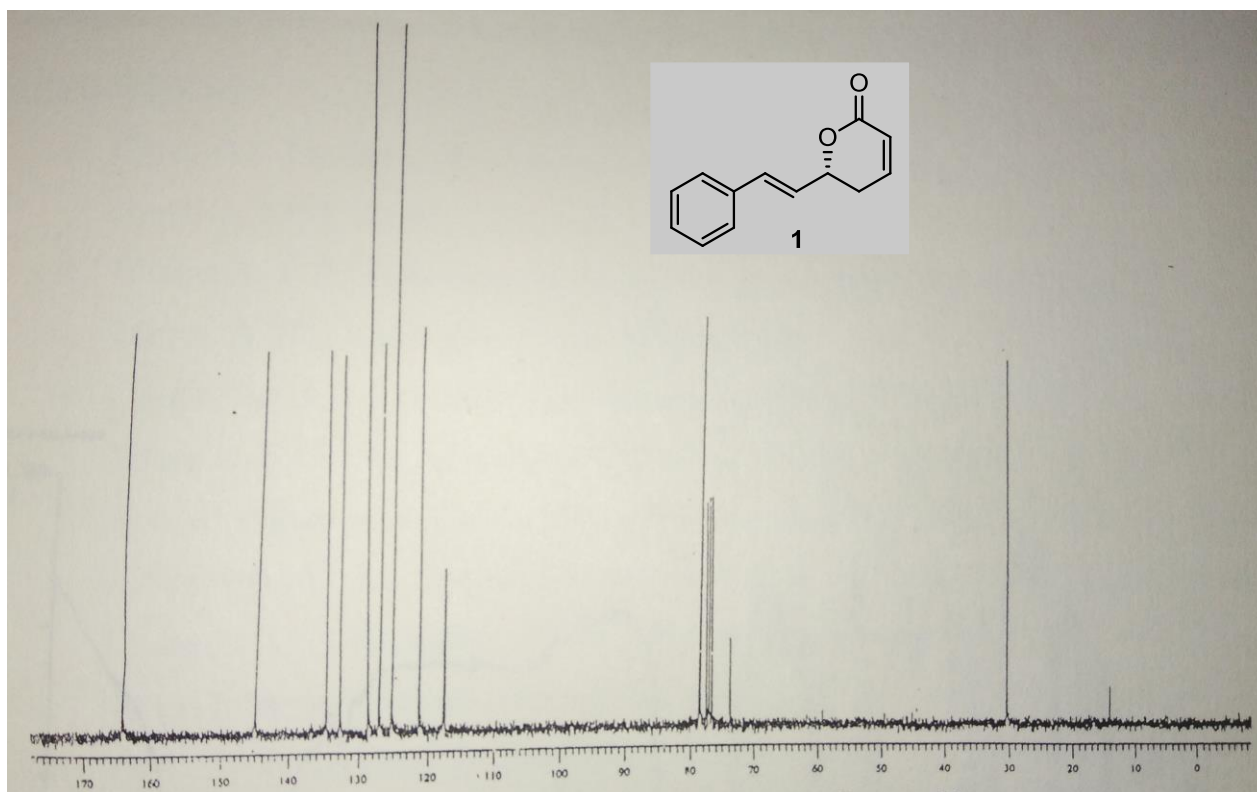
**$^1\text{H}$  &  $^{13}\text{C}$  NMR spectra** **$^1\text{H}$  NMR spectrum of **10**** **$^{13}\text{C}$  NMR spectrum of **10**** **$^1\text{H}$  NMR spectrum of **3****

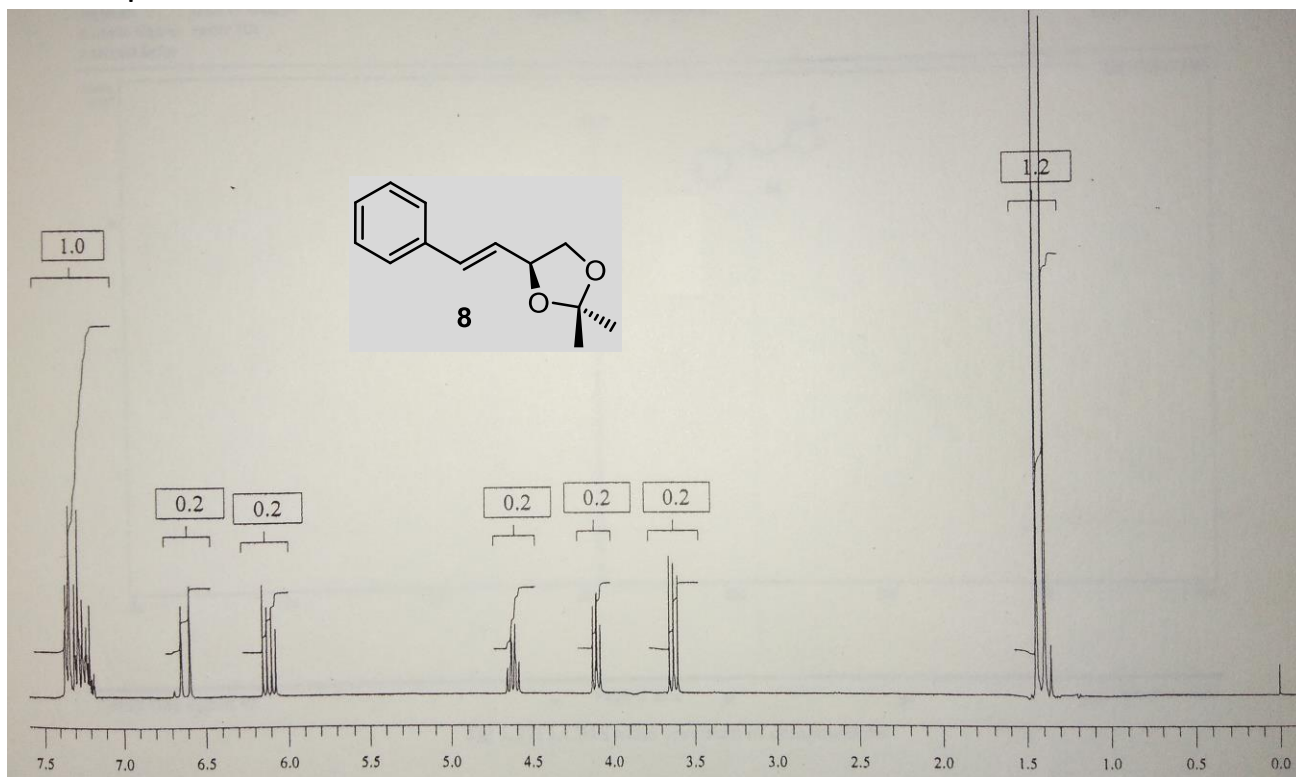
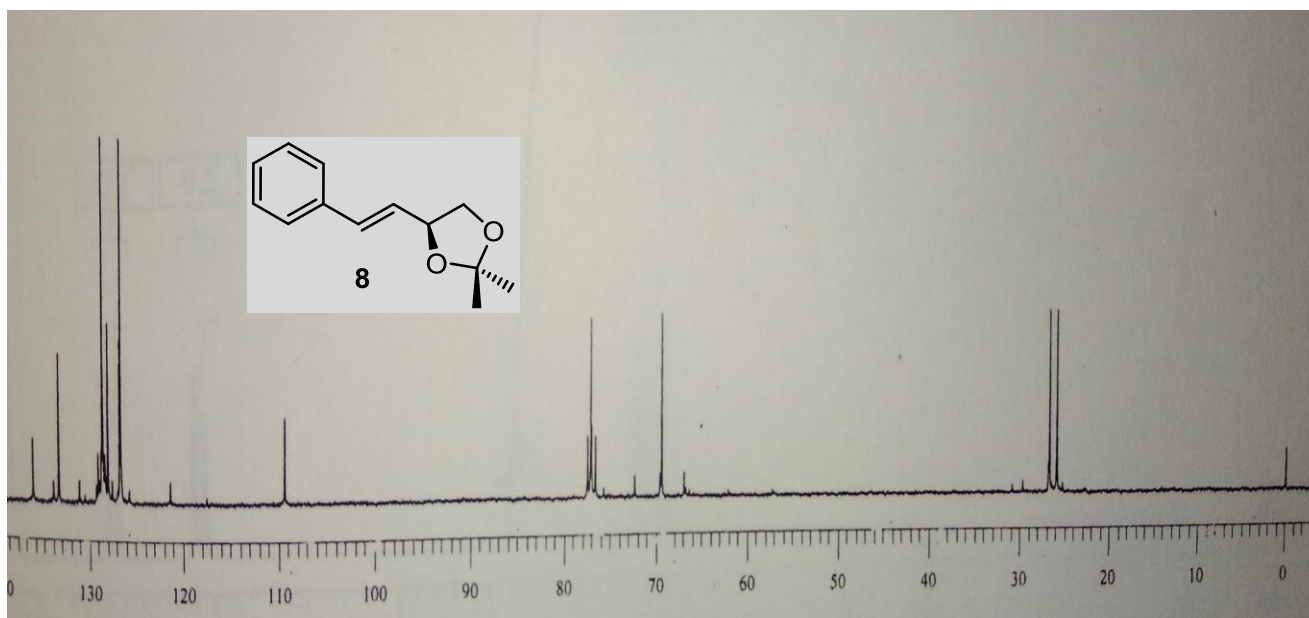
 $^{13}\text{C}$  NMR spectrum of **3** $^1\text{H}$  NMR spectrum of **11**

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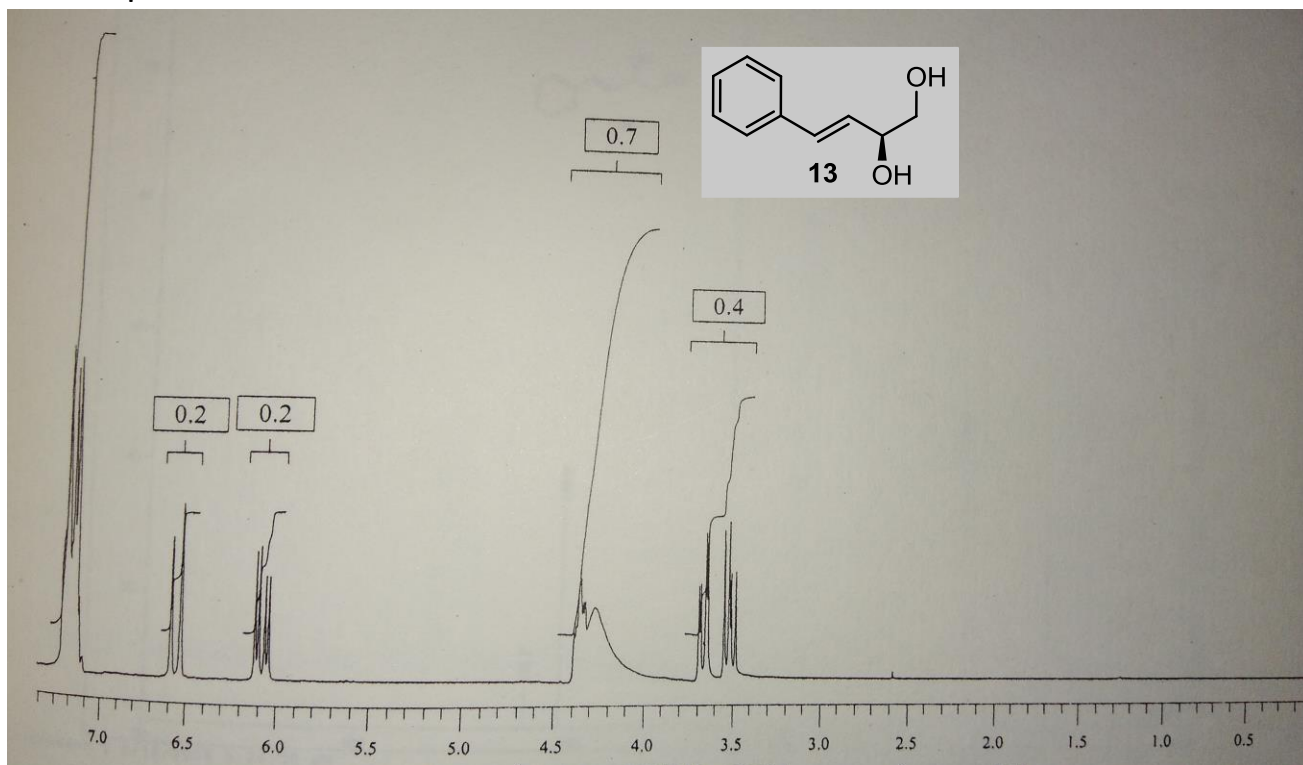
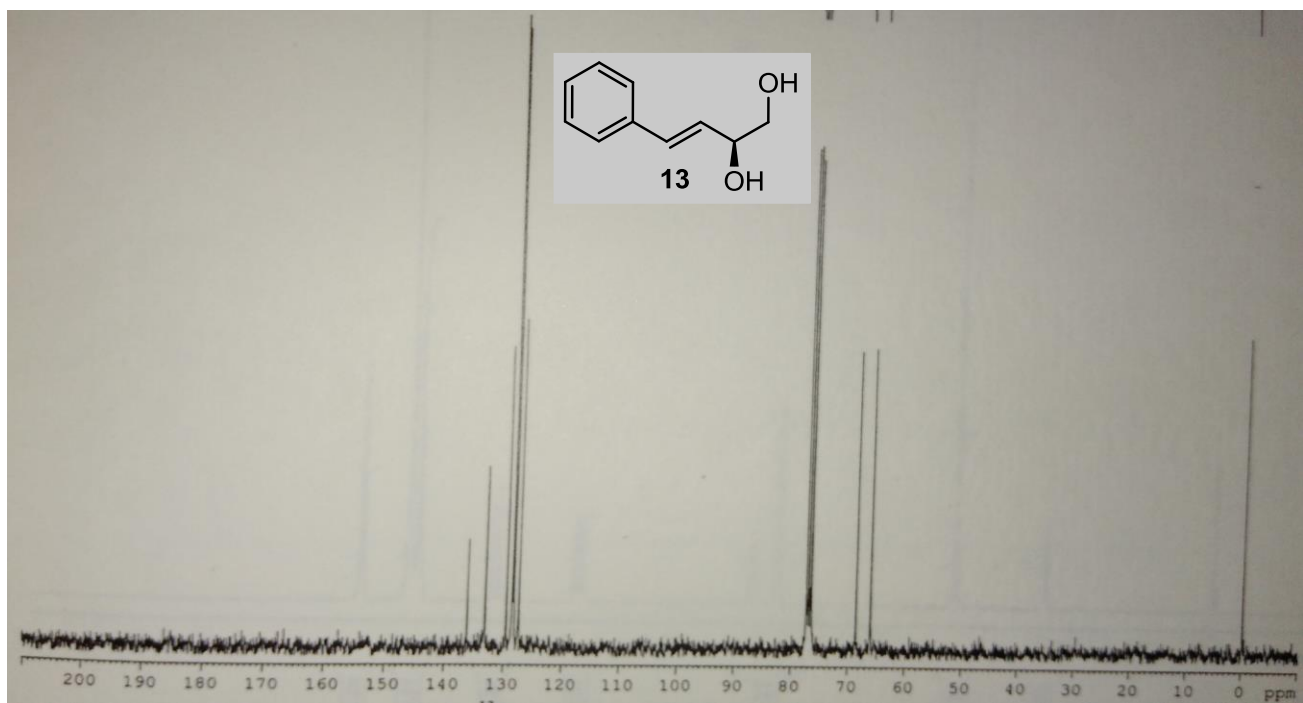
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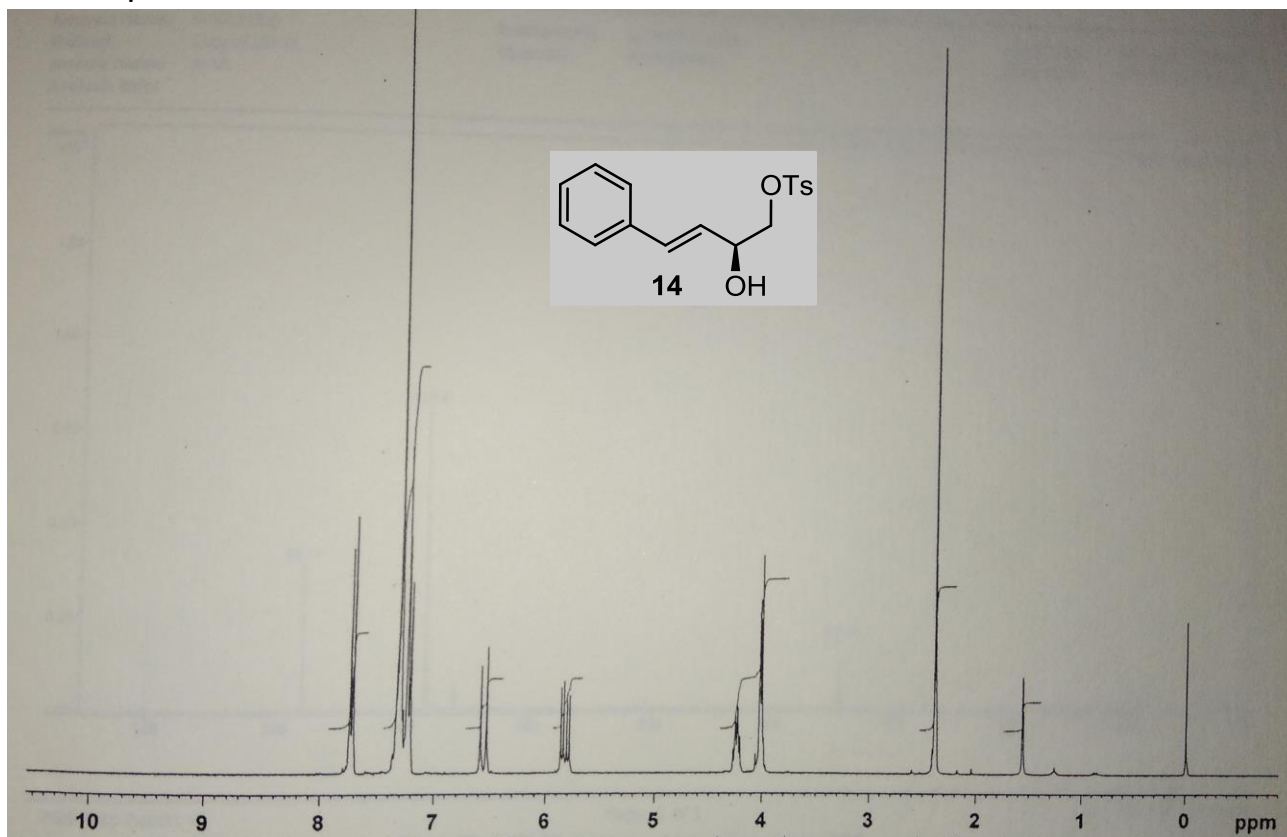
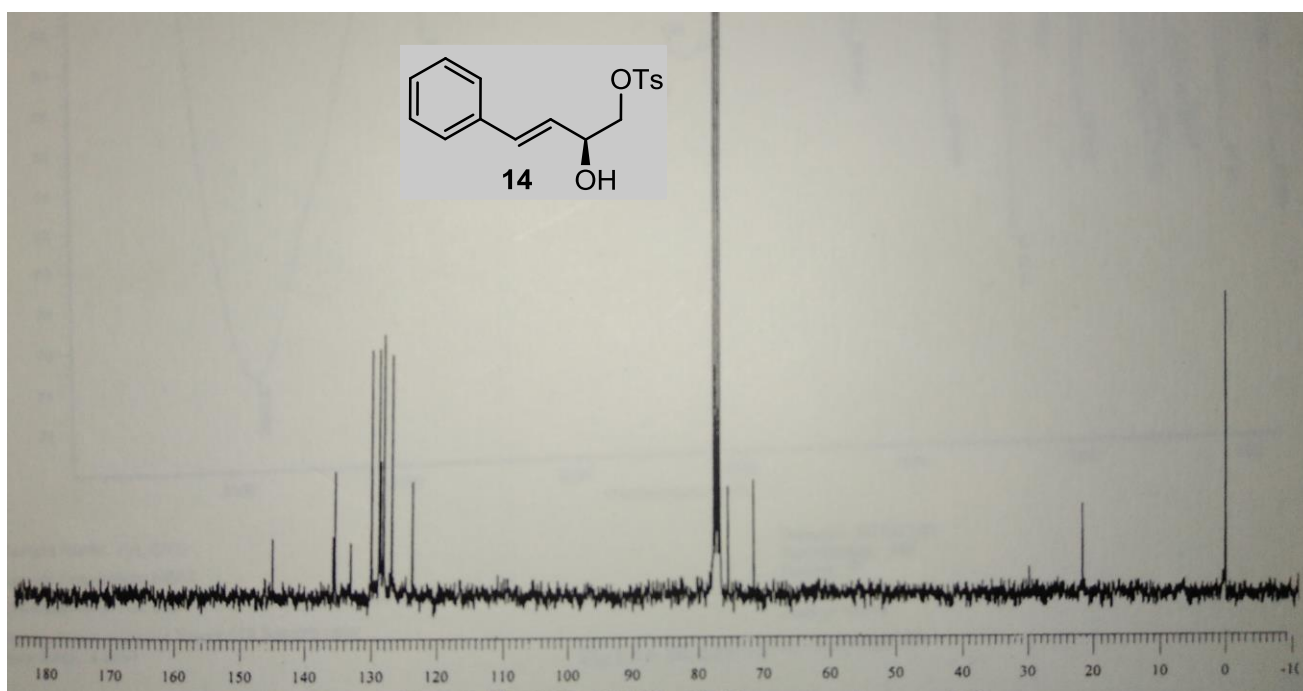
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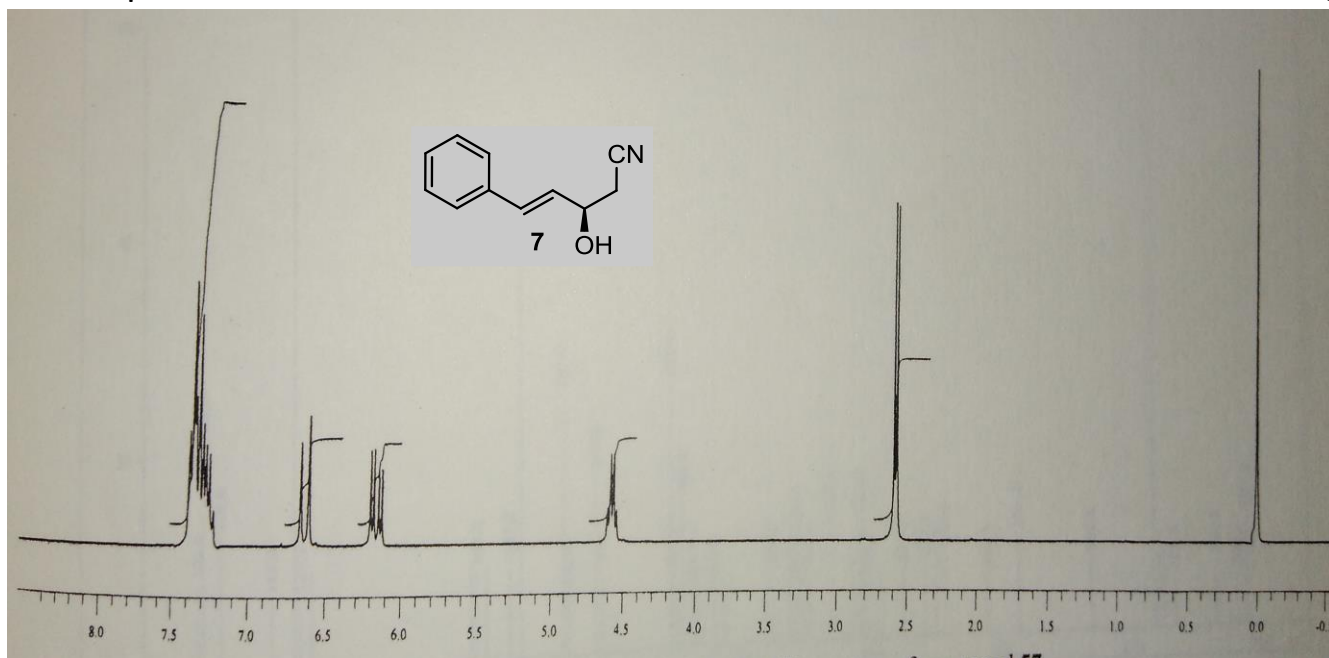
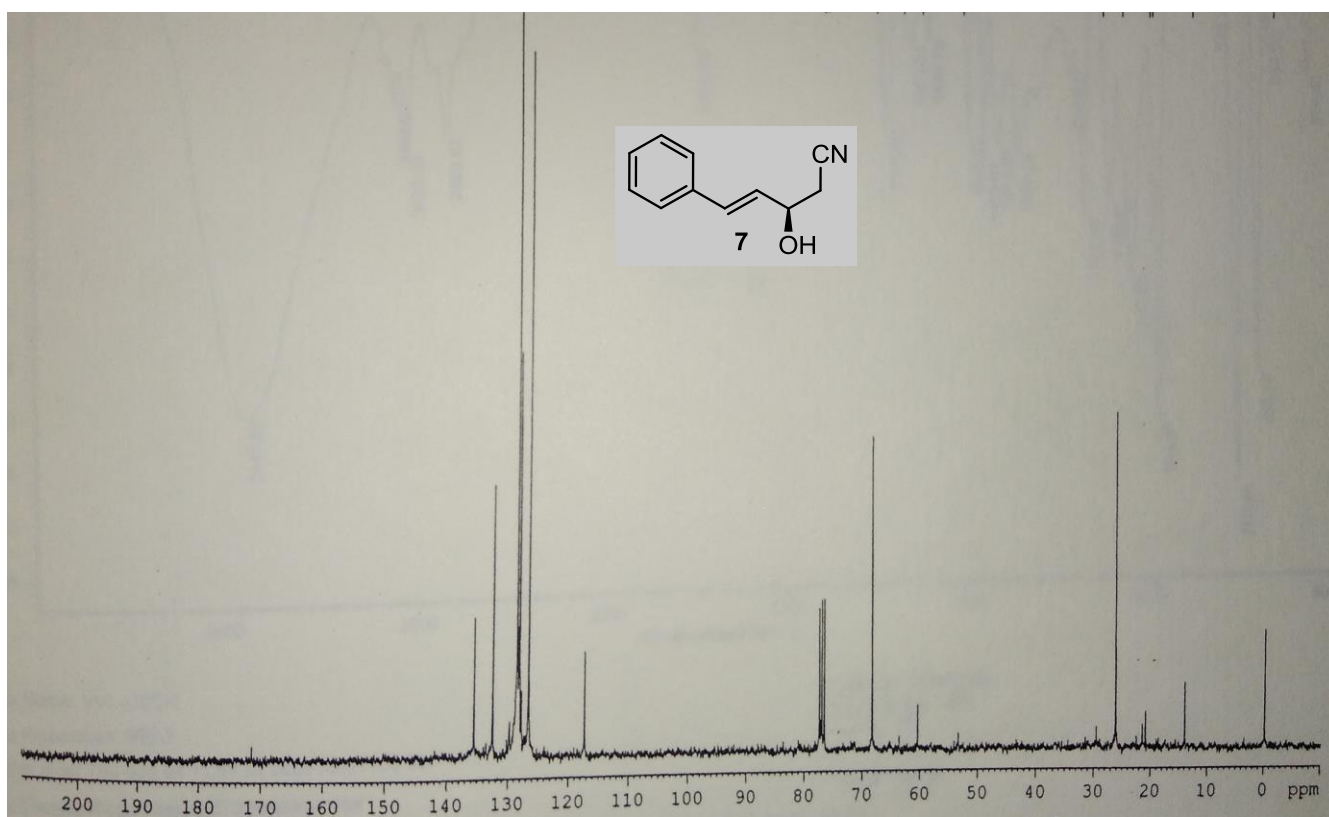
 $^{13}\text{C}$  NMR spectrum of **1** $^1\text{H}$  NMR spectrum of **1**

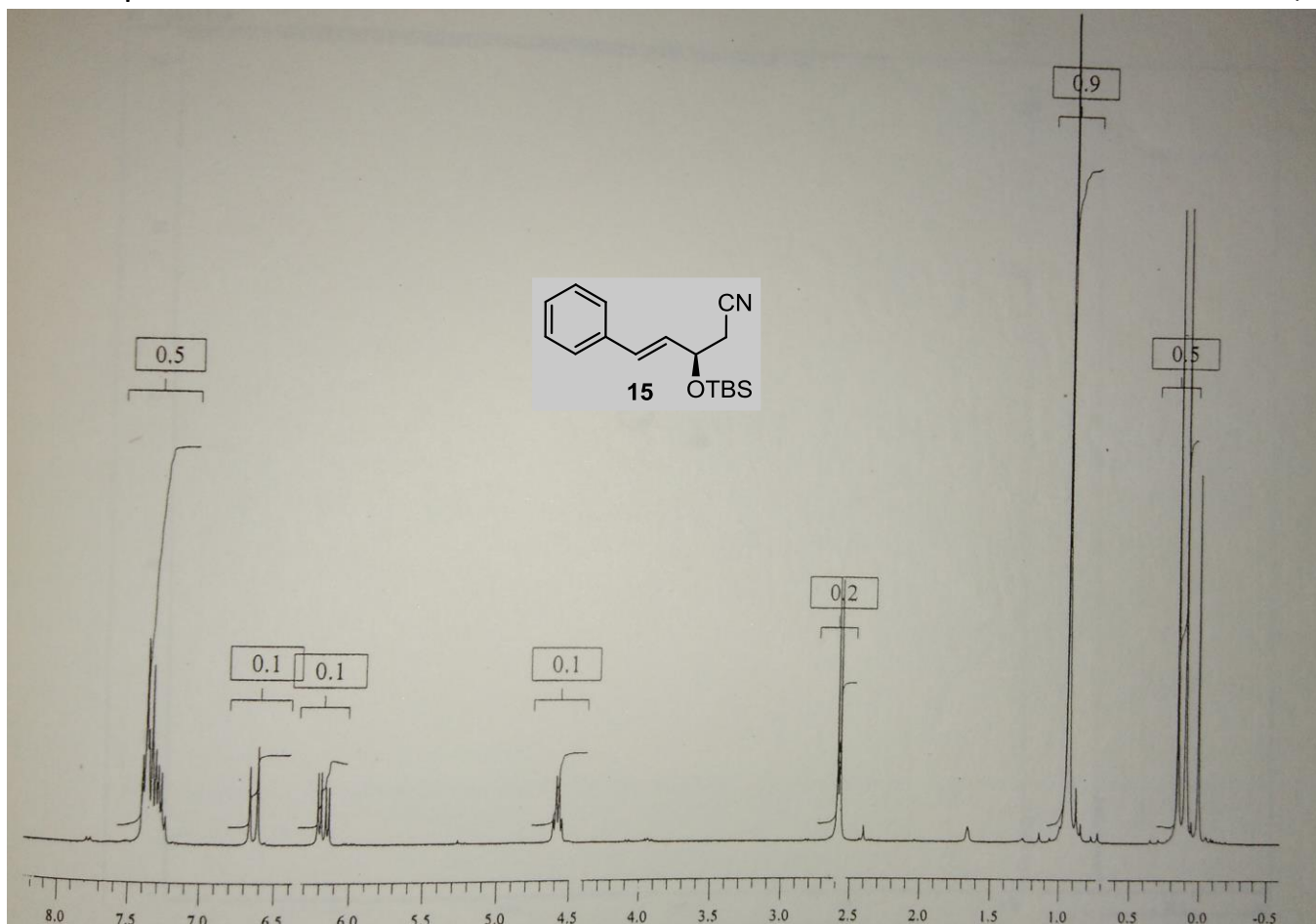
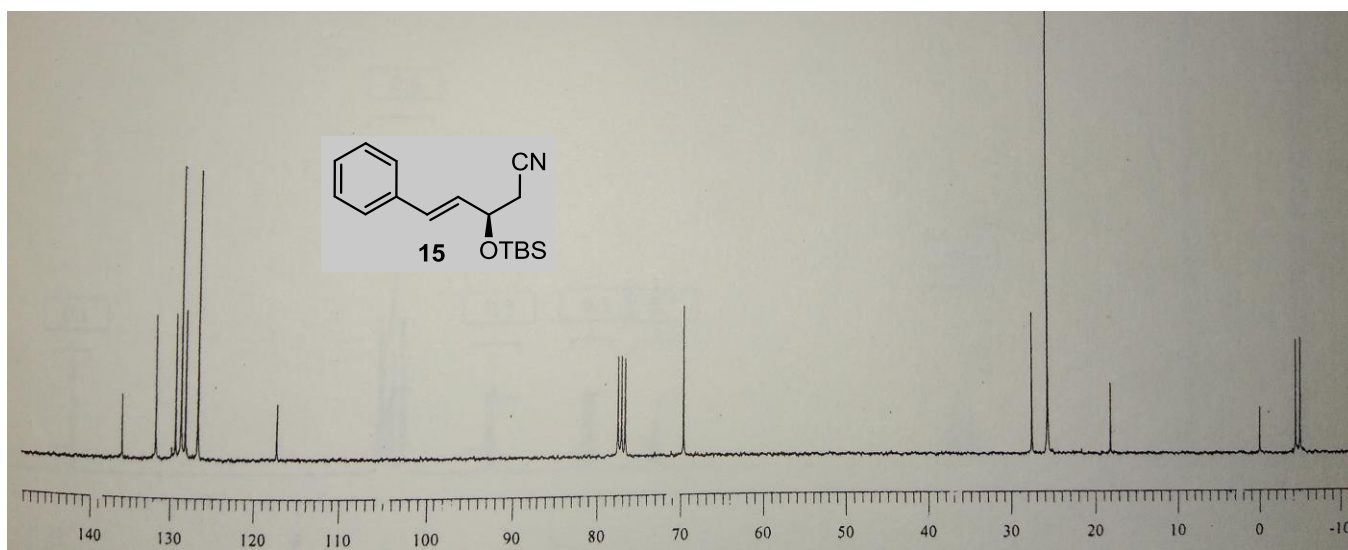
<sup>13</sup>C NMR spectrum of **8**<sup>1</sup>H NMR spectrum of **13**

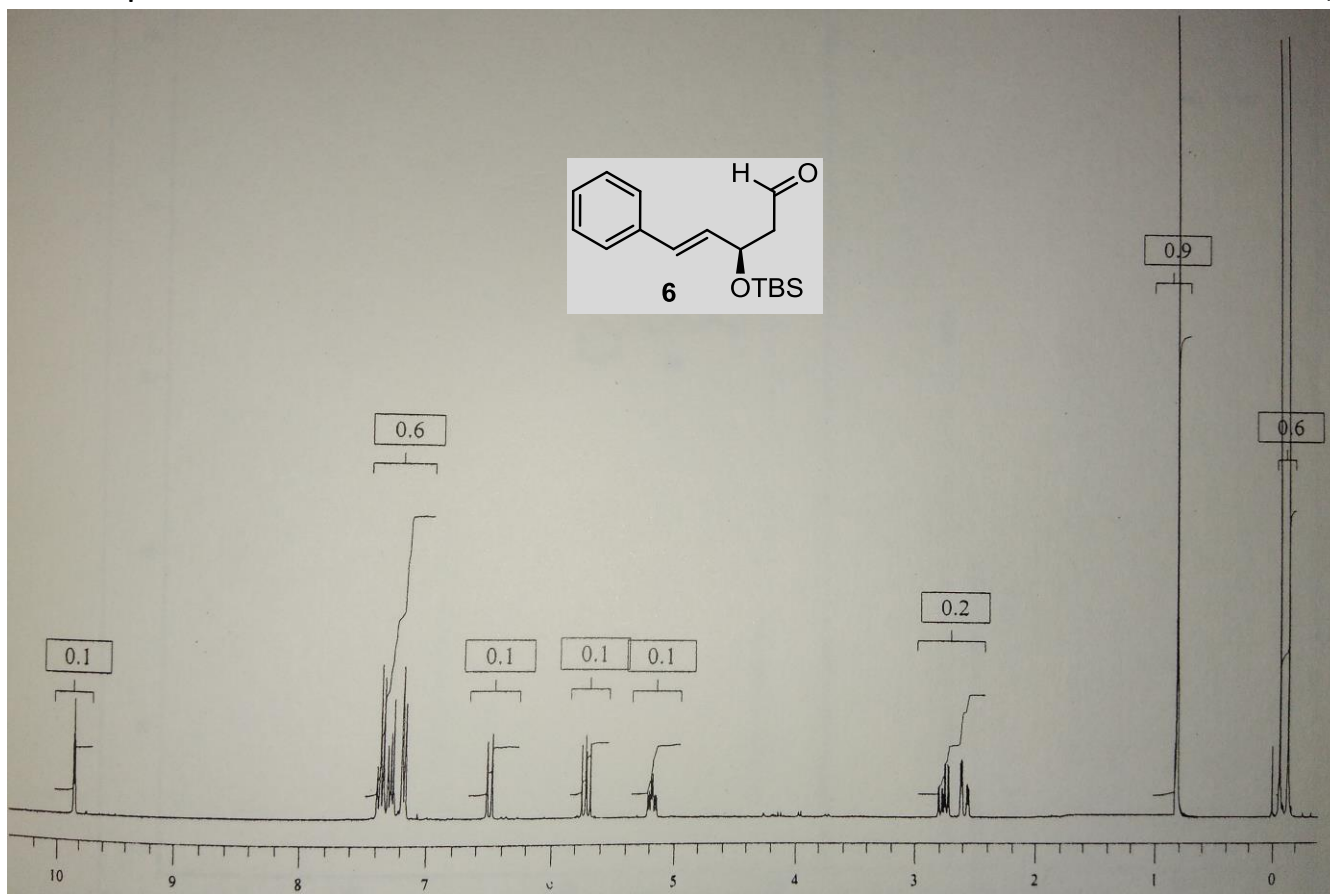
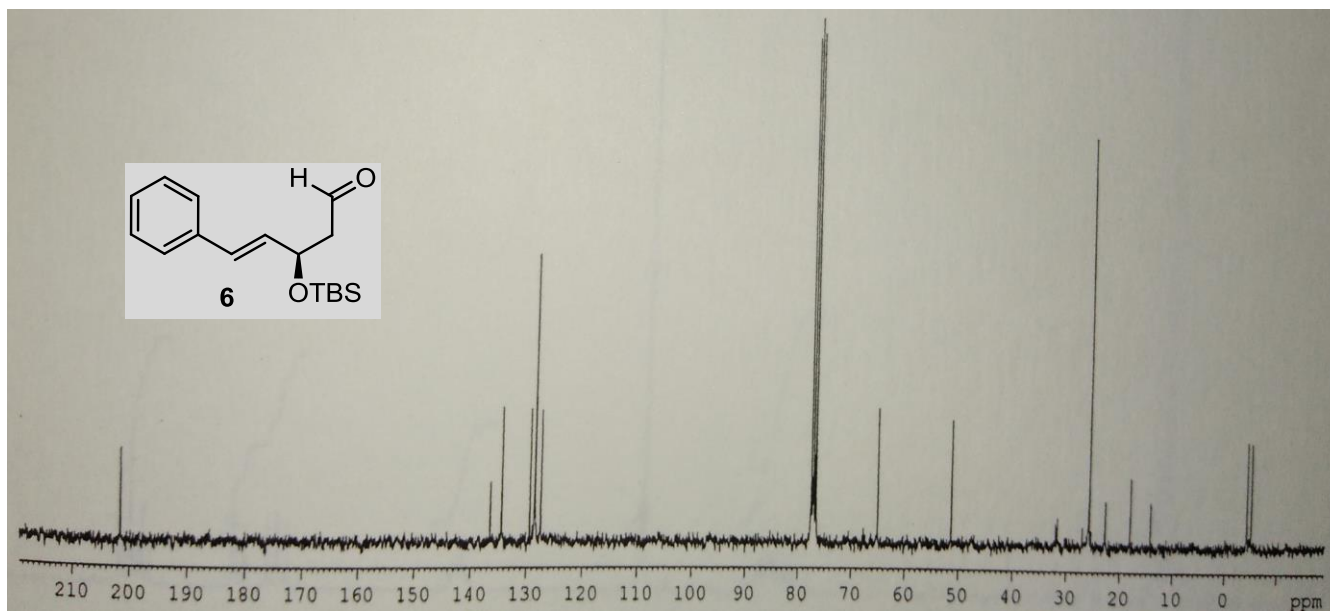


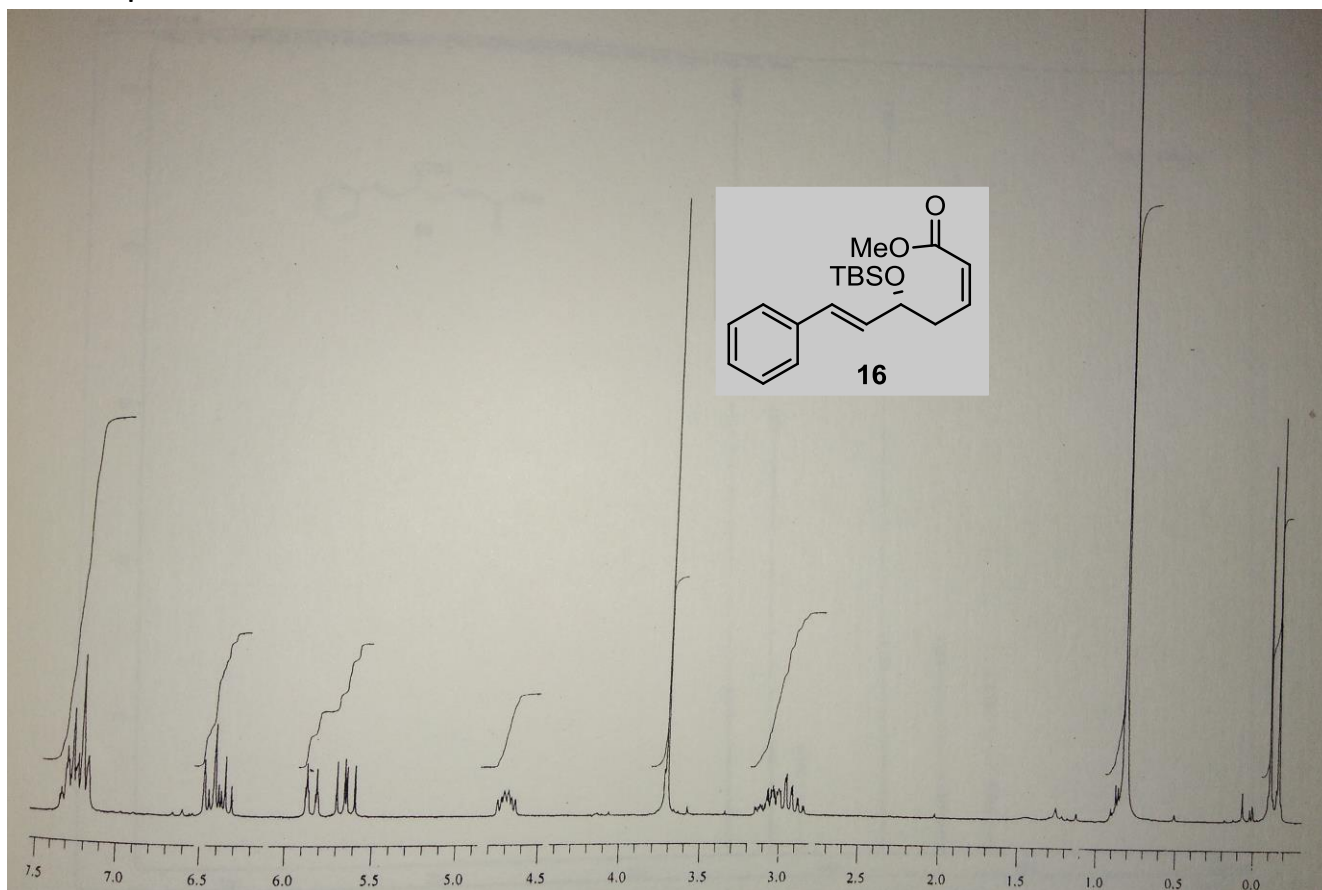
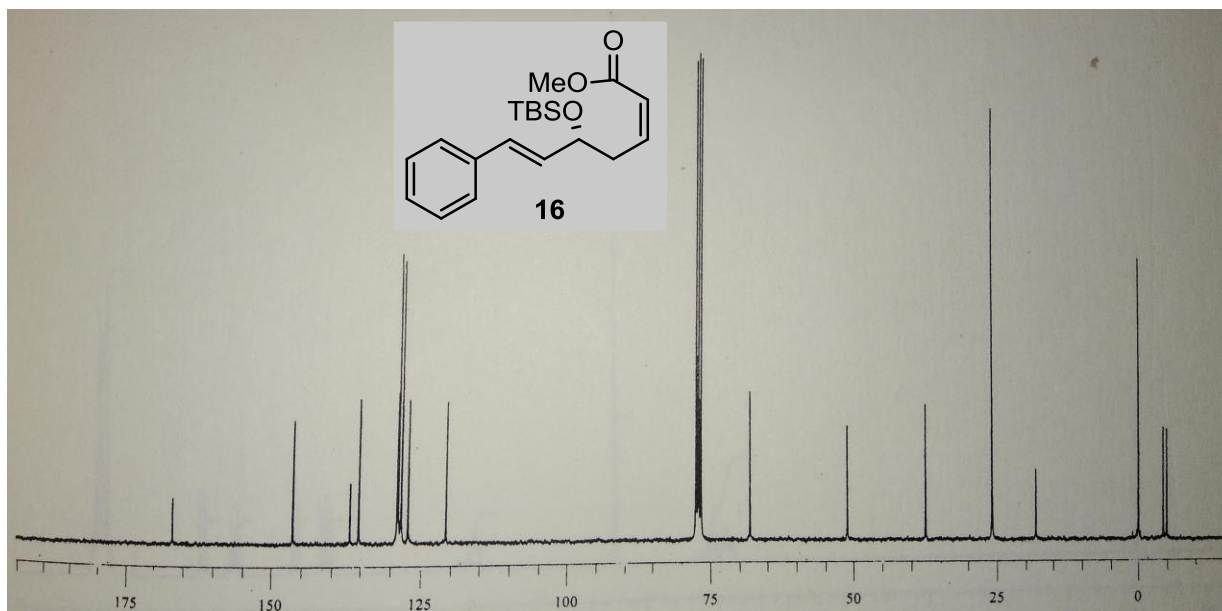
<sup>13</sup>C NMR spectrum of **13**<sup>1</sup>H NMR spectrum of **14**

 $^{13}\text{C}$  NMR spectrum of **14** $^1\text{H}$  NMR spectrum of **7**

 $^{13}\text{C}$  NMR spectrum of **7** $^1\text{H}$  NMR spectrum of **15**

<sup>13</sup>C NMR spectrum of **15**<sup>1</sup>H NMR spectrum of **6**

 $^{13}\text{C}$  NMR spectrum of **6** $^1\text{H}$  NMR spectrum of **16**

<sup>13</sup>C NMR spectrum of **16**<sup>1</sup>H NMR spectrum of **5**

