

## **Supporting Information File 2**

**for**

### **Stereoselective total synthesis and structural revision of the diacetylenic diol natural products strongylodiols H and I**

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<sup>2</sup>Department of Chemistry, S. V. U. College of Sciences, Tirupati-517502

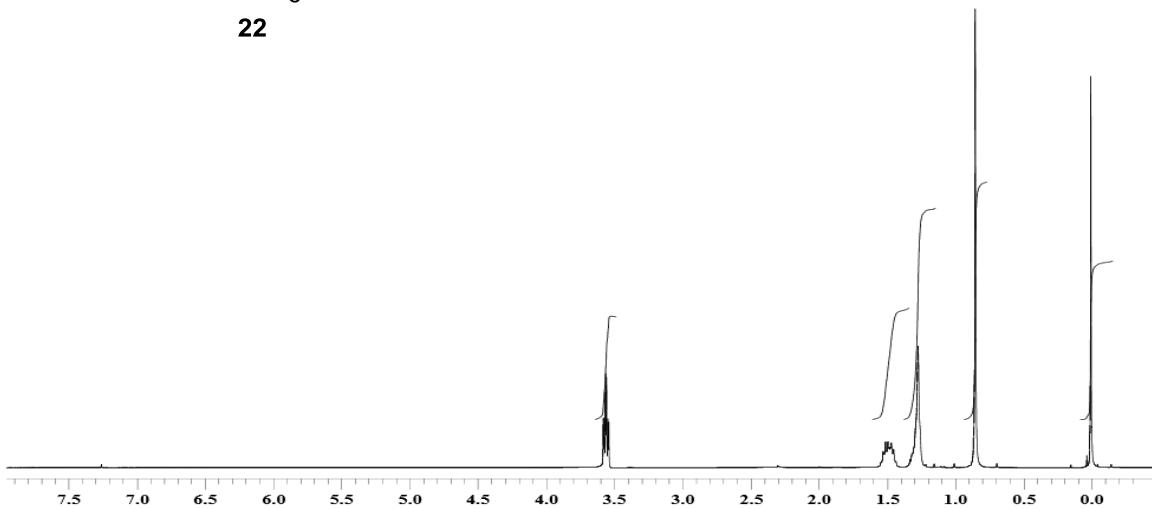
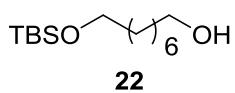
Email: Srihari Pabbaraja - [srihari@iict.res.in](mailto:srihari@iict.res.in)

\*Corresponding author

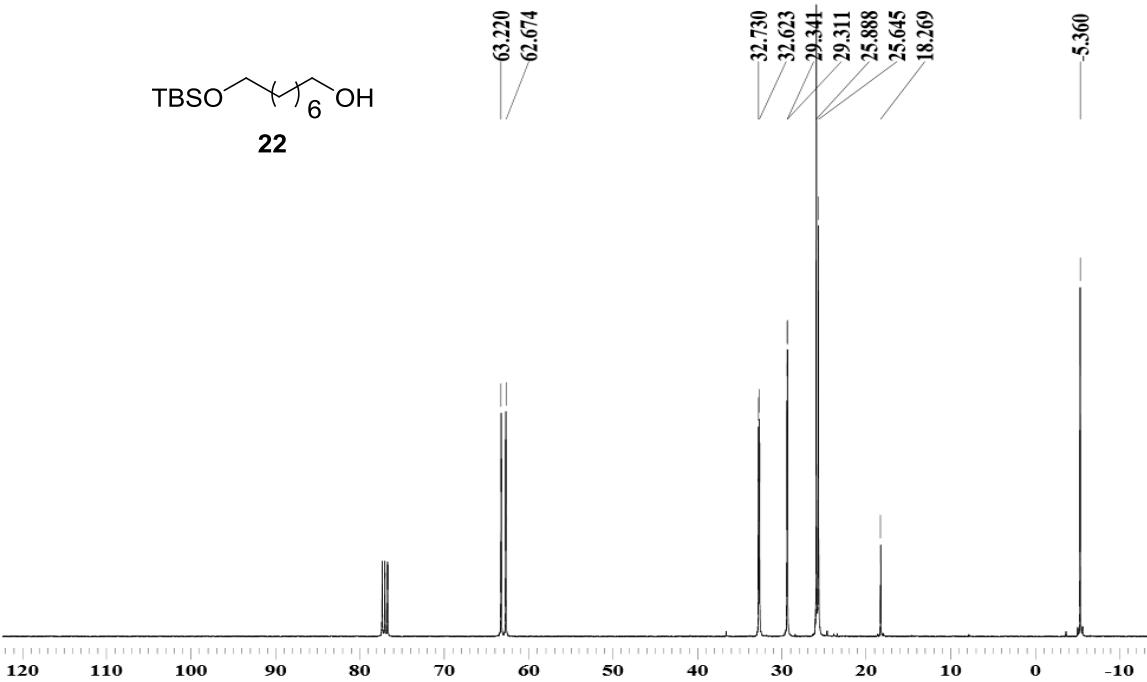
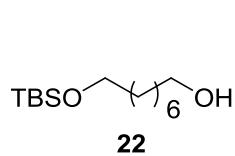
### **<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of key compounds**

#### **Table of contents**

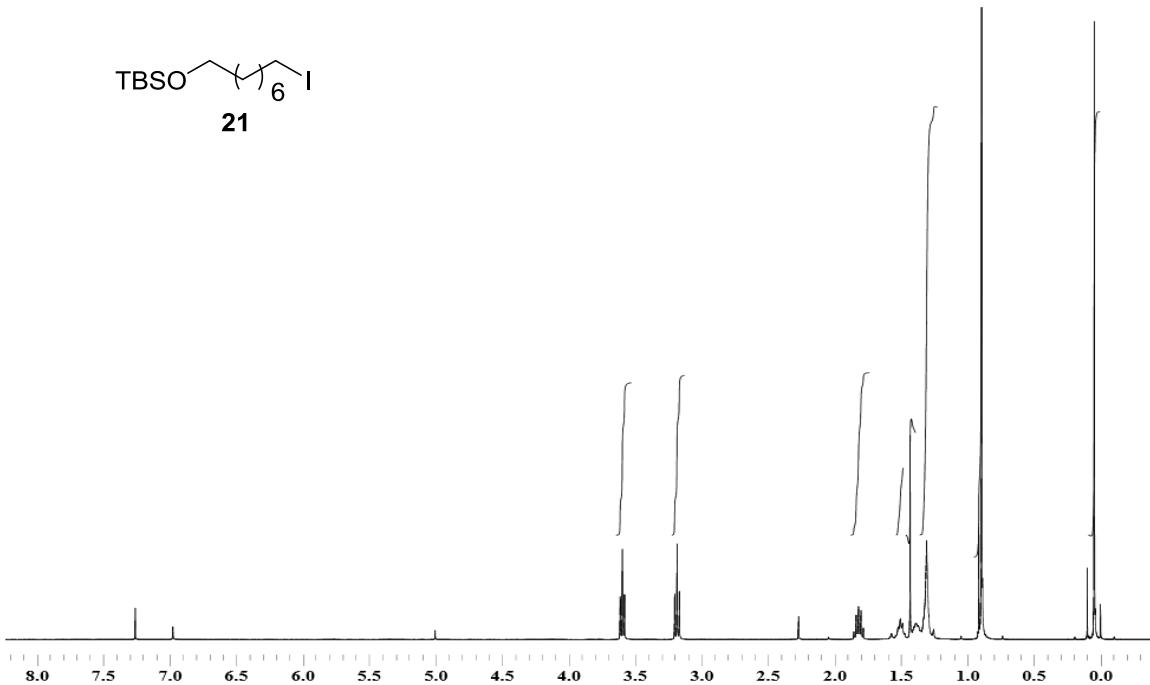
Copies of <sup>1</sup> H and <sup>13</sup> C NMR .....	S2
LCMS Chromatogram of compound <b>33a</b> .....	S21



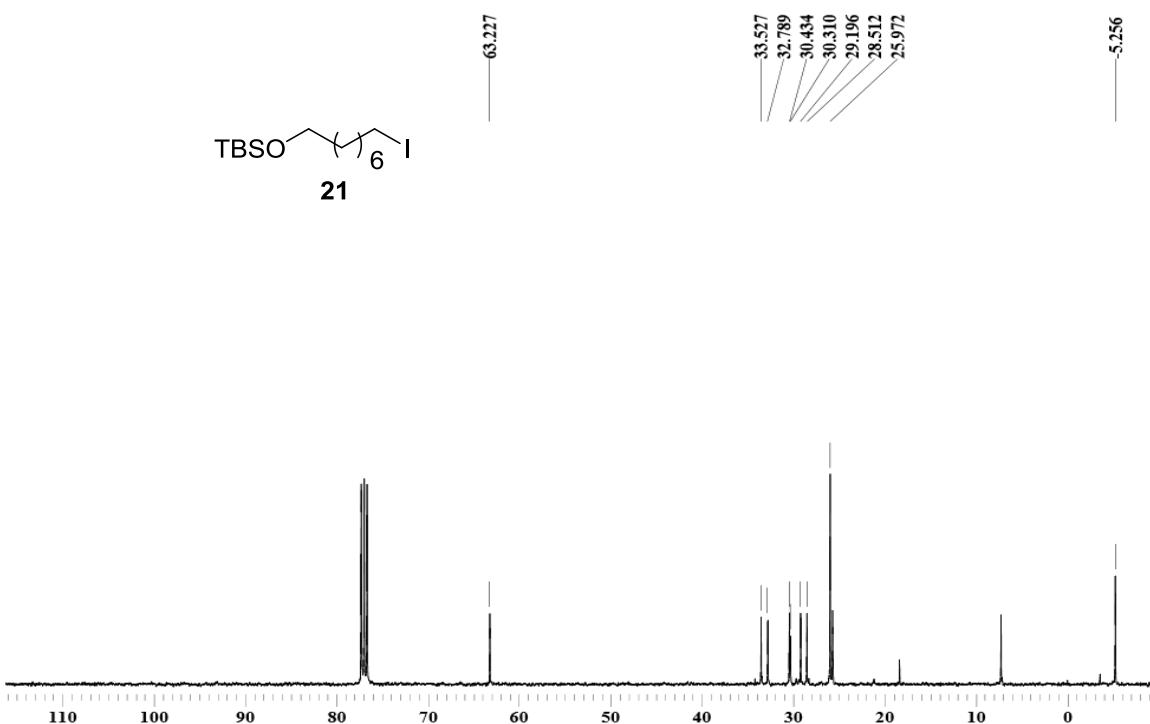
<sup>1</sup>H NMR Spectrum of compound **22** ( $\text{CDCl}_3$ , 400 MHz)



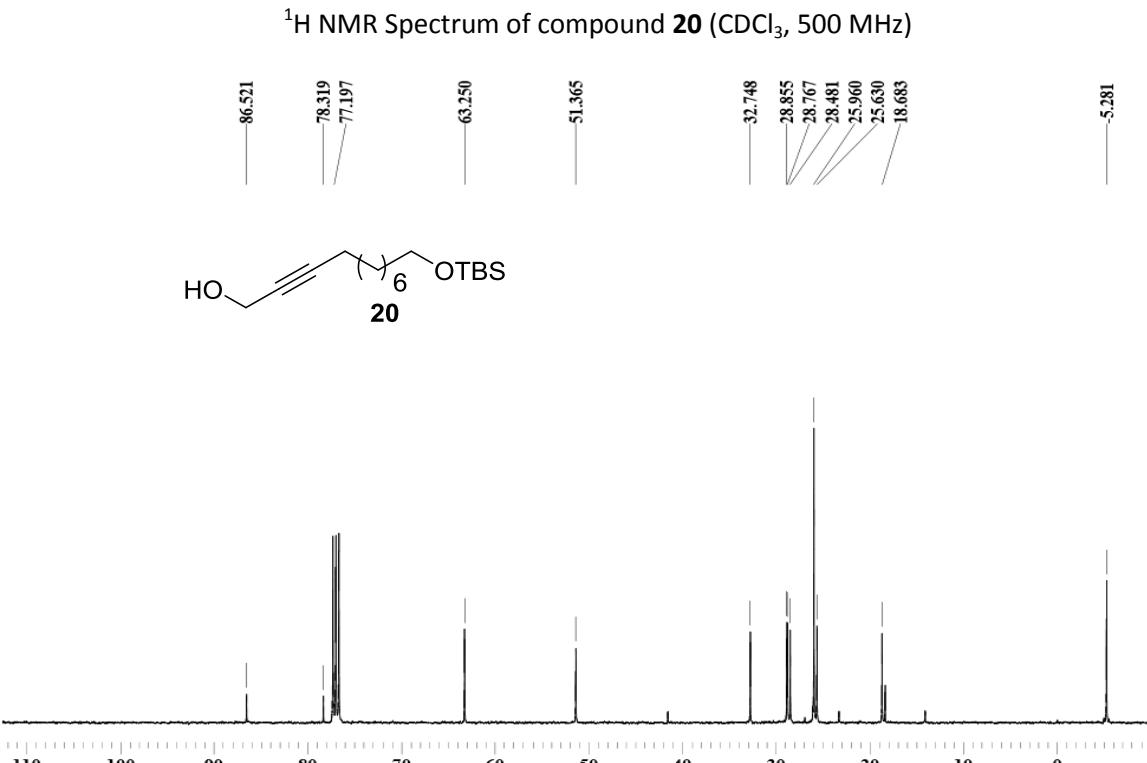
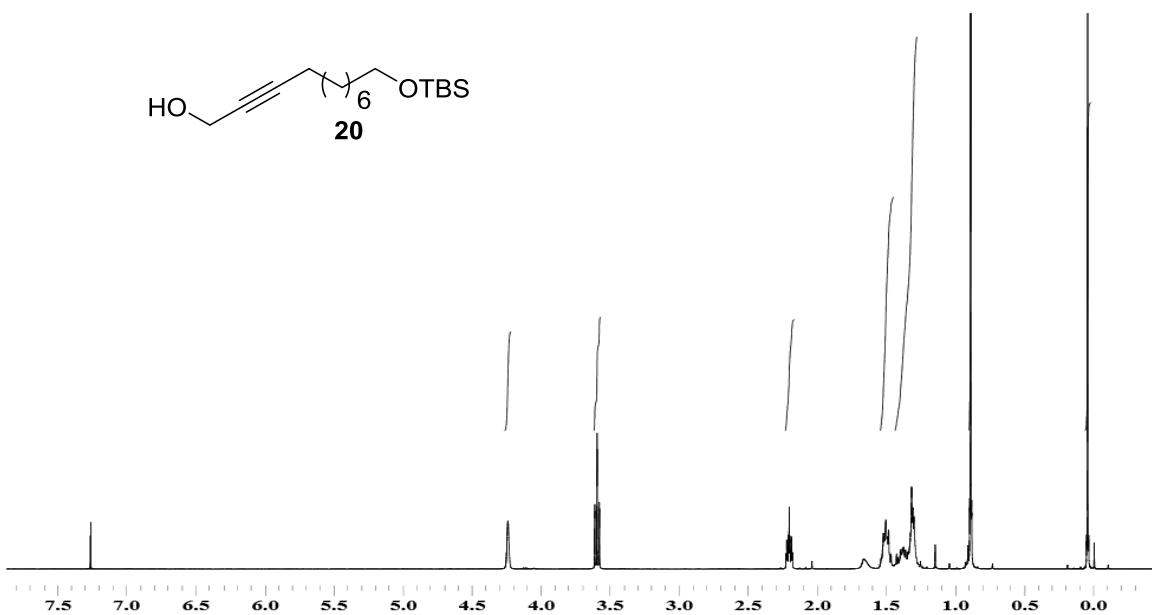
<sup>13</sup>C NMR Spectrum of compound **22** ( $\text{CDCl}_3$ , 100 MHz)



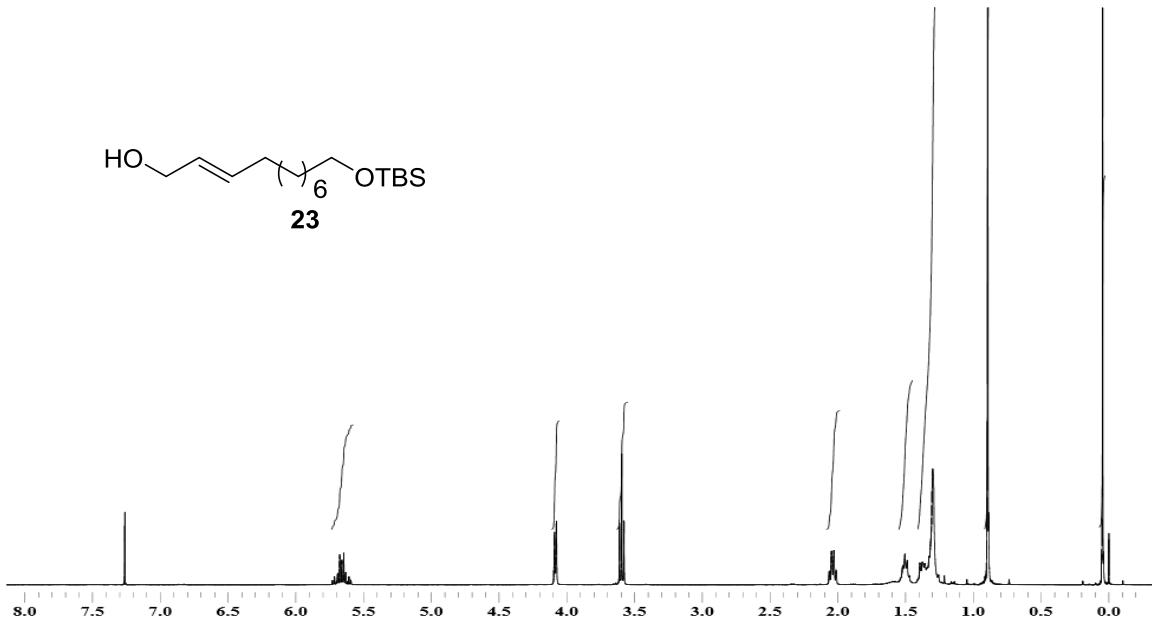
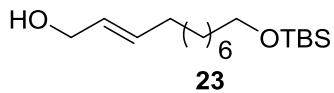
$^1\text{H}$  NMR Spectrum of compound **21** ( $\text{CDCl}_3$ , 300 MHz)



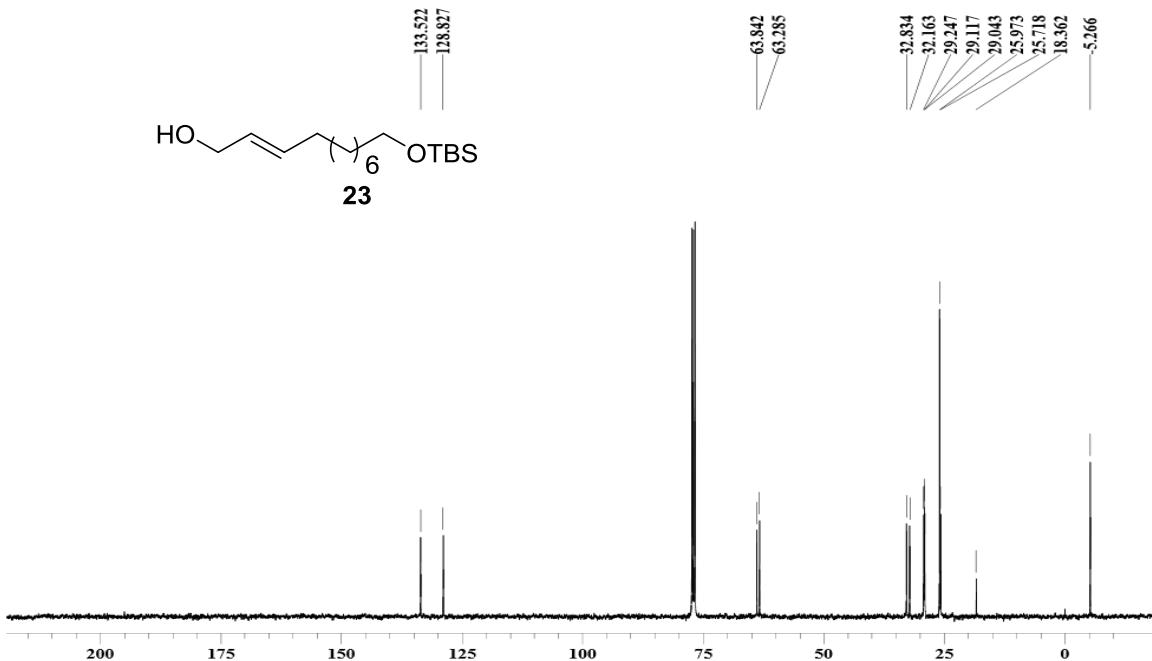
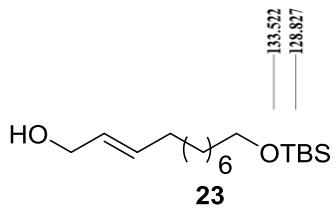
$^{13}\text{C}$  NMR Spectrum of compound **21** ( $\text{CDCl}_3$ , 75 MHz)



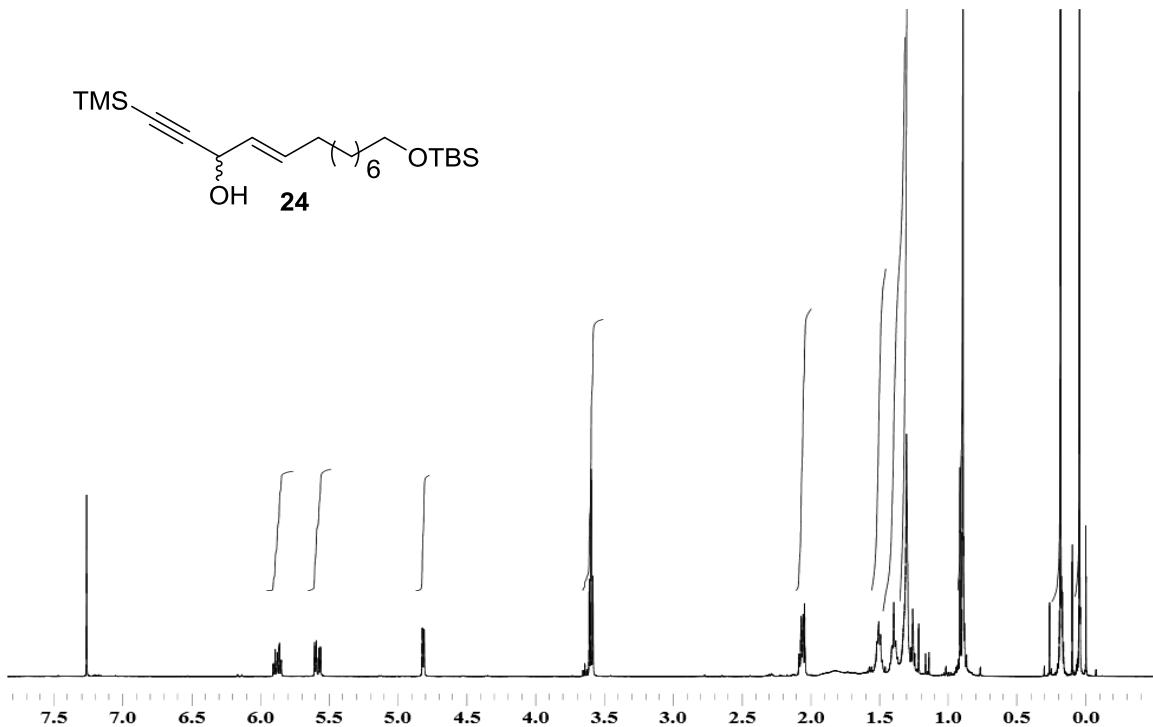
<sup>13</sup>C NMR Spectrum of compound **20** ( $\text{CDCl}_3$ , 125 MHz)



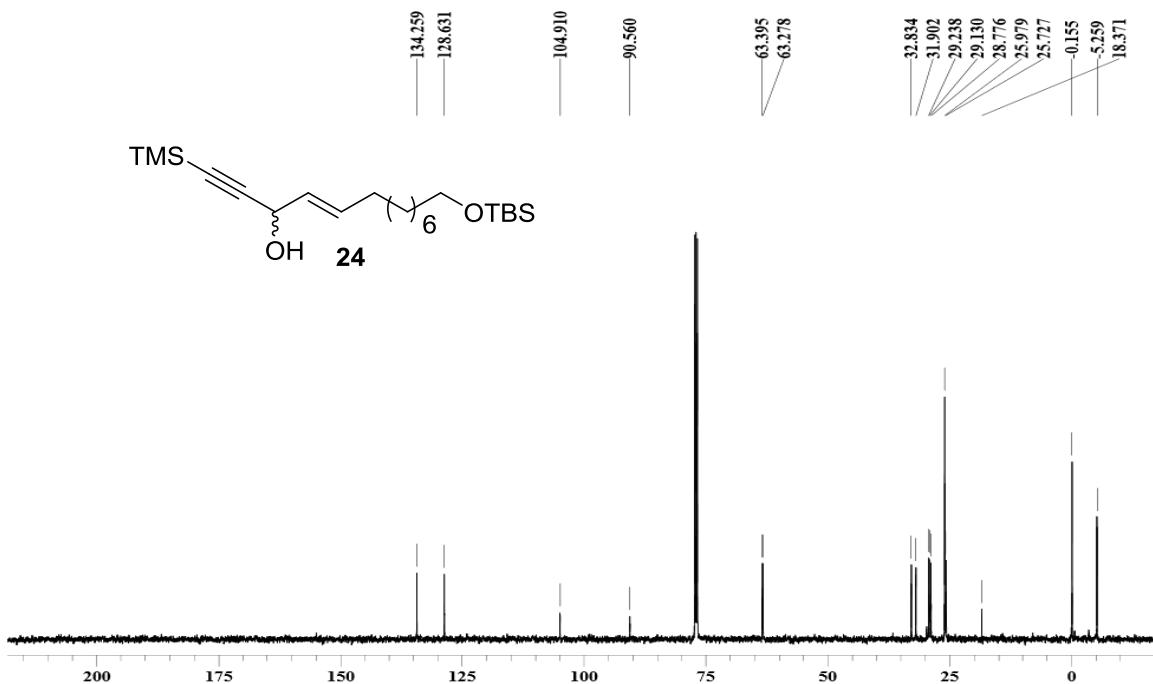
<sup>1</sup>H NMR Spectrum of compound **23** (CDCl<sub>3</sub>, 500 MHz)



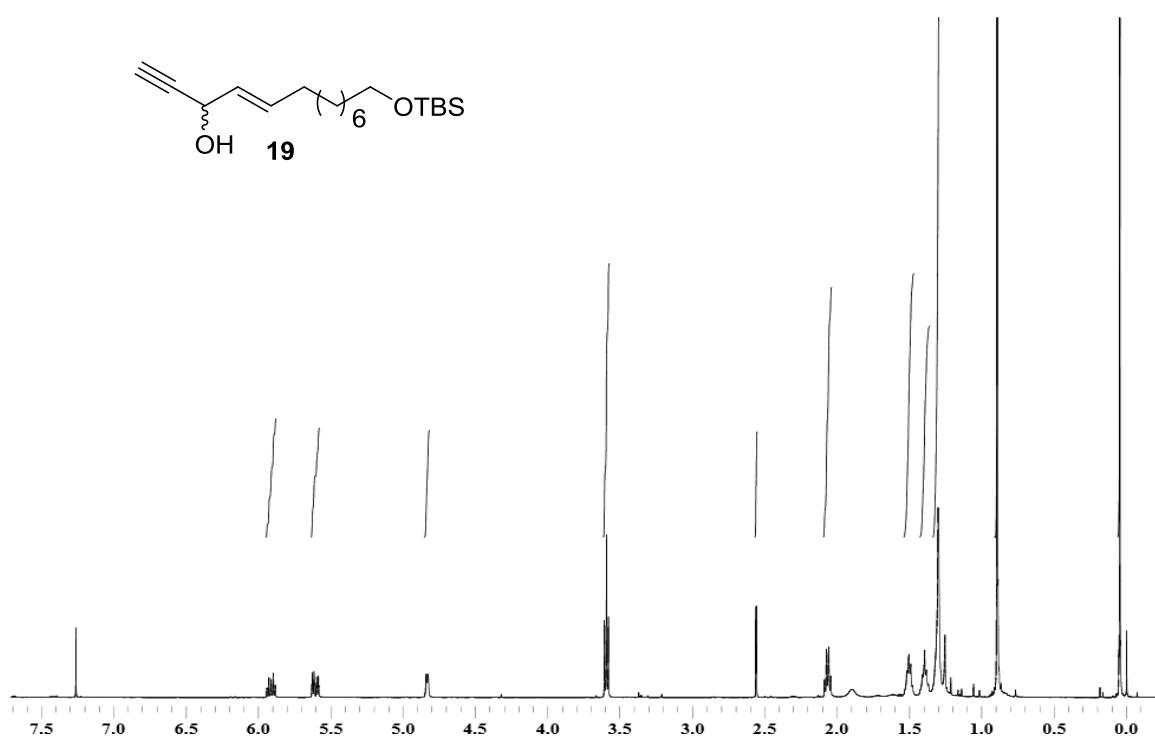
<sup>13</sup>C NMR Spectrum of compound **23** (CDCl<sub>3</sub>, 125 MHz)



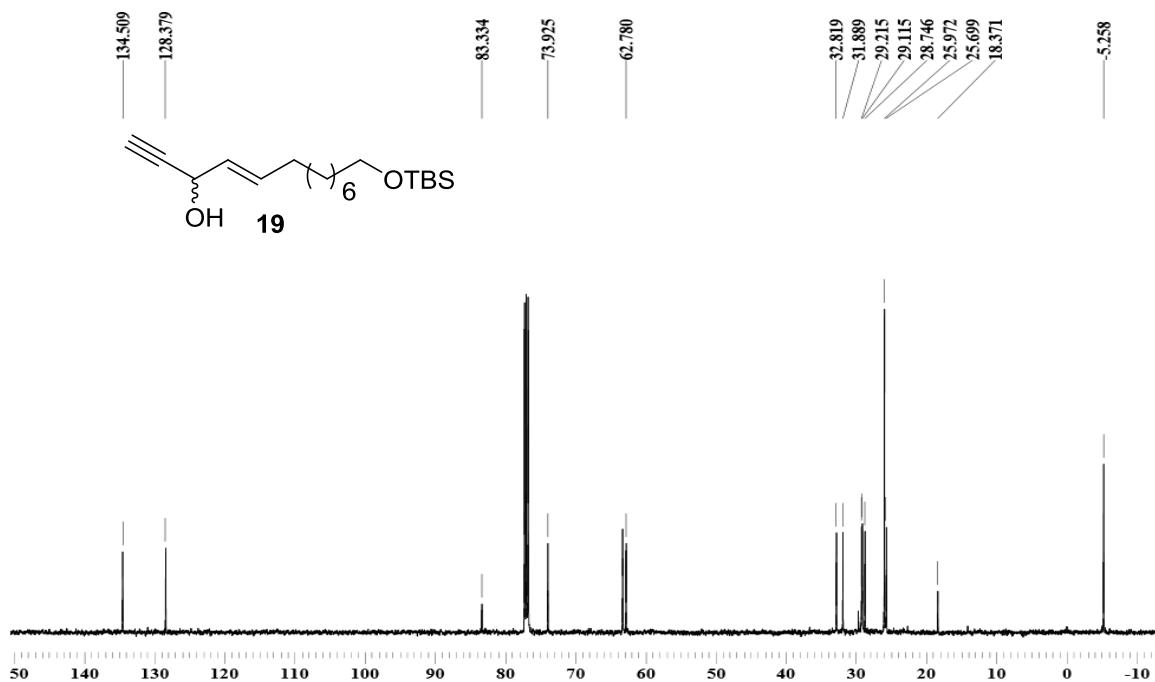
<sup>1</sup>H NMR Spectrum of compound **24** ( $\text{CDCl}_3$ , 400 MHz)



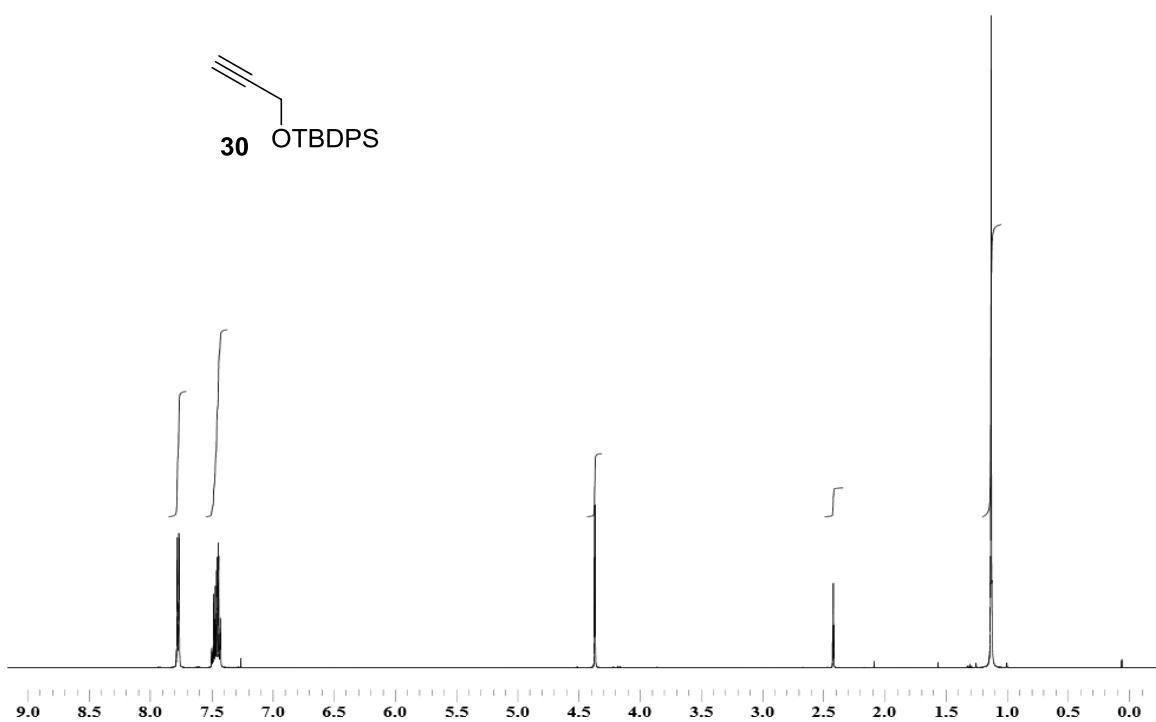
<sup>13</sup>C NMR Spectrum of compound **24** ( $\text{CDCl}_3$ , 100 MHz)



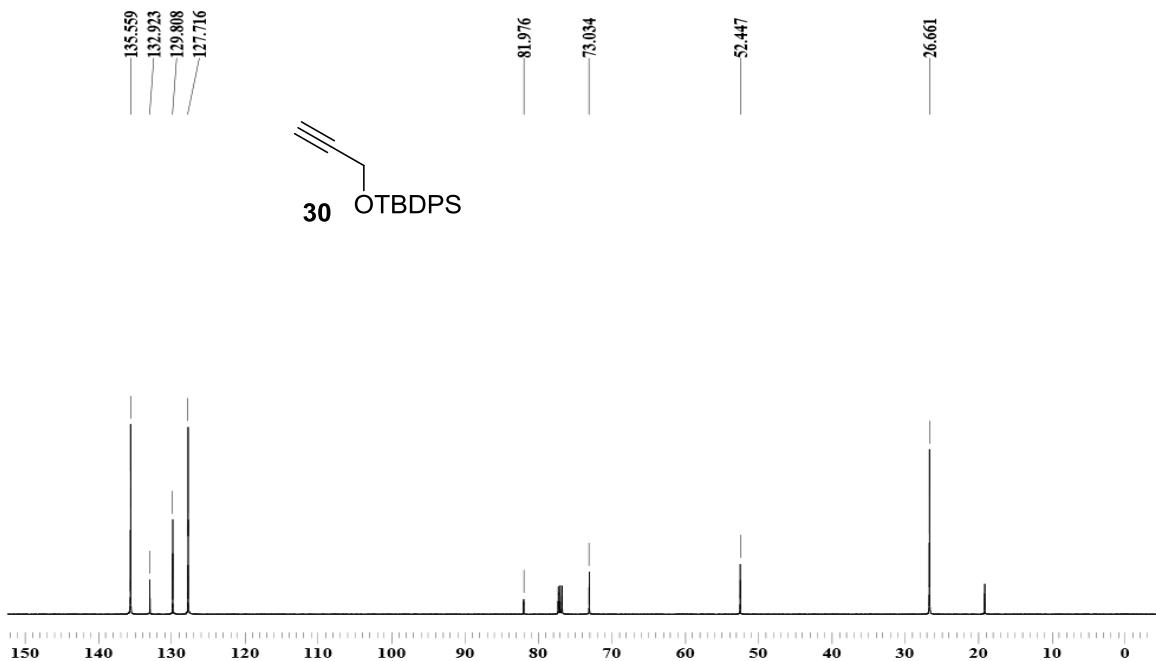
$^1\text{H}$  NMR Spectrum of compound **19** ( $\text{CDCl}_3$ , 300 MHz)



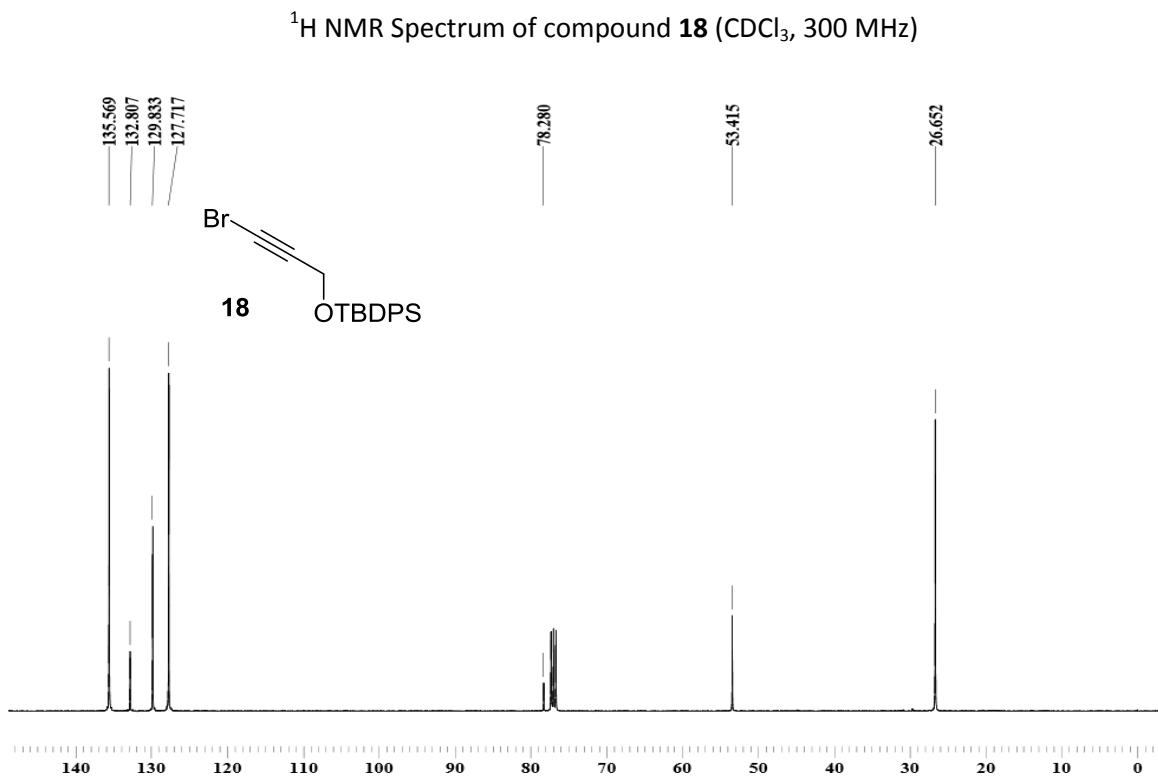
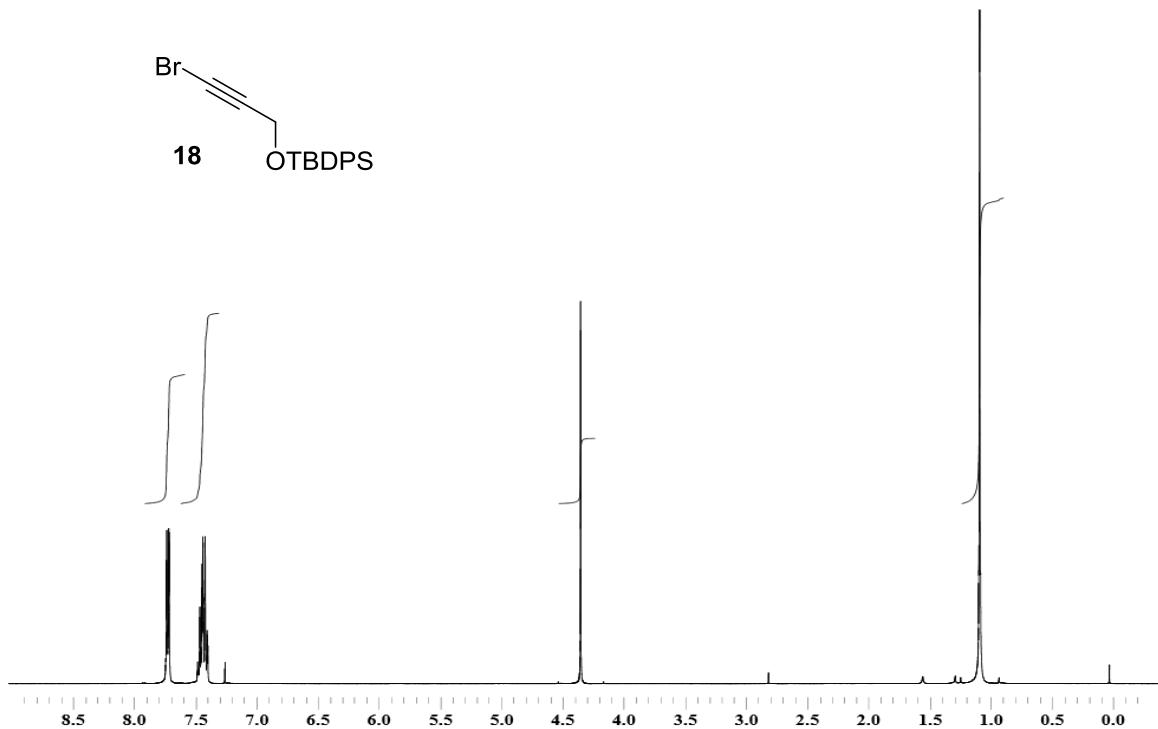
$^{13}\text{C}$  NMR Spectrum of compound **19** ( $\text{CDCl}_3$ , 75 MHz)

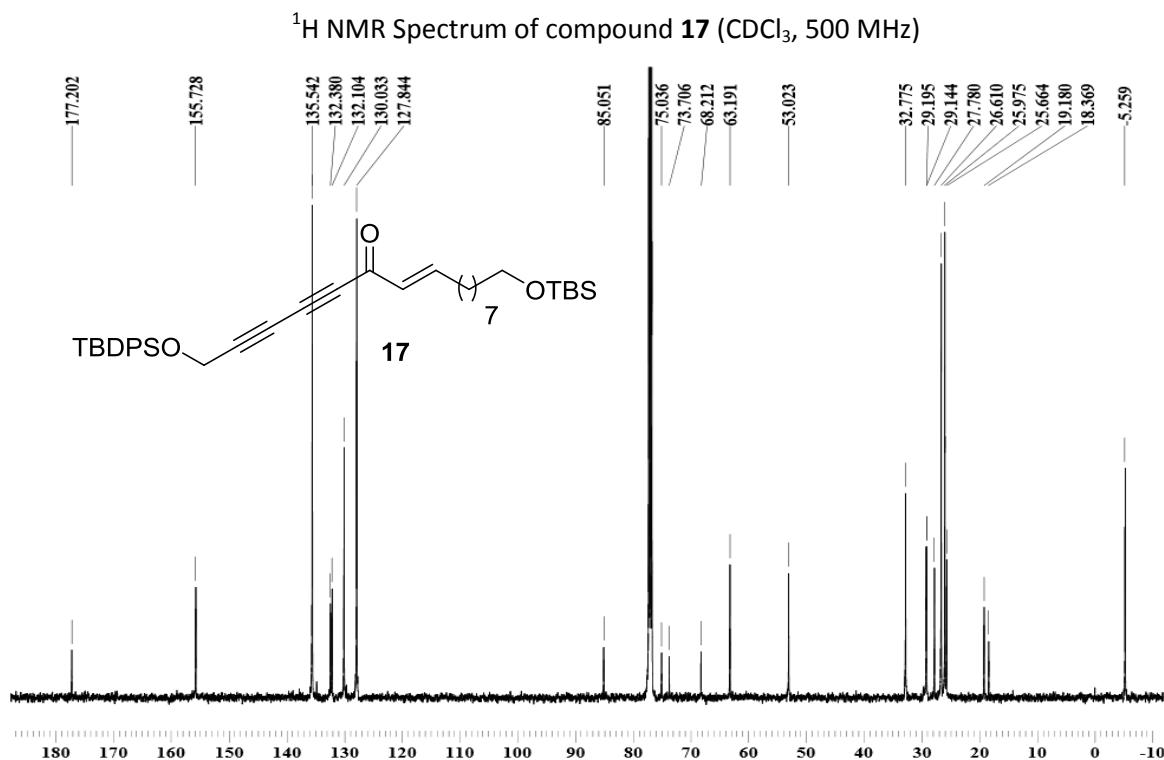
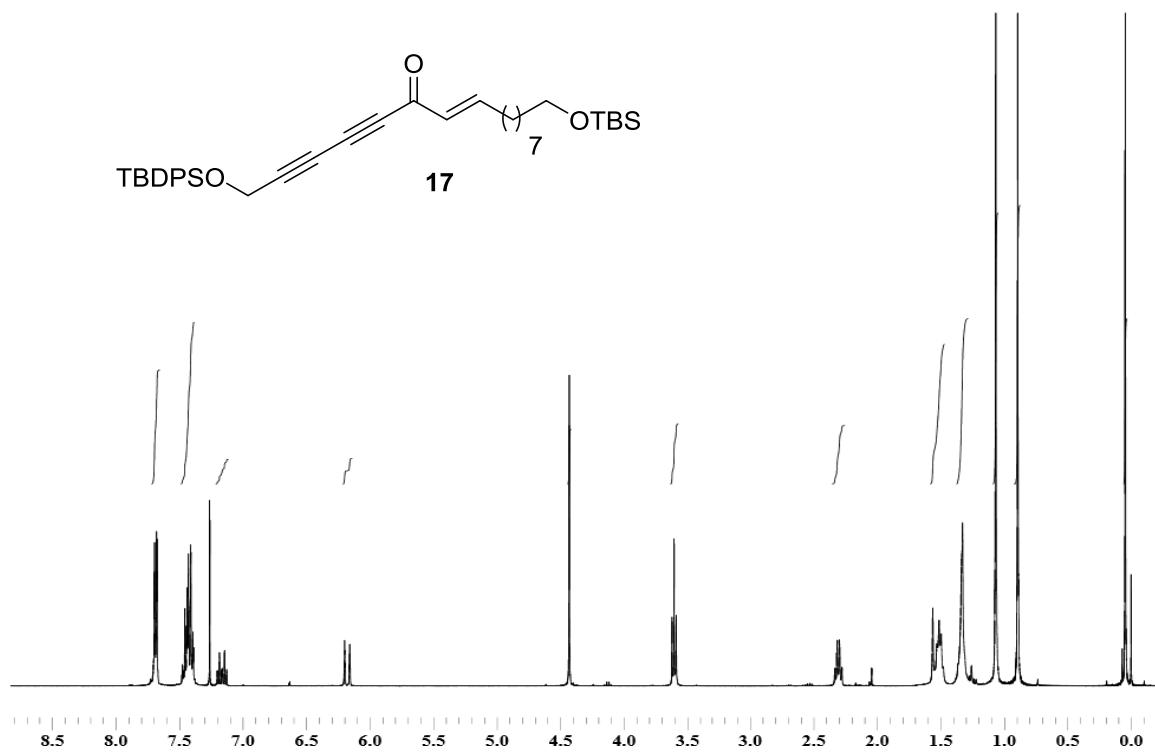


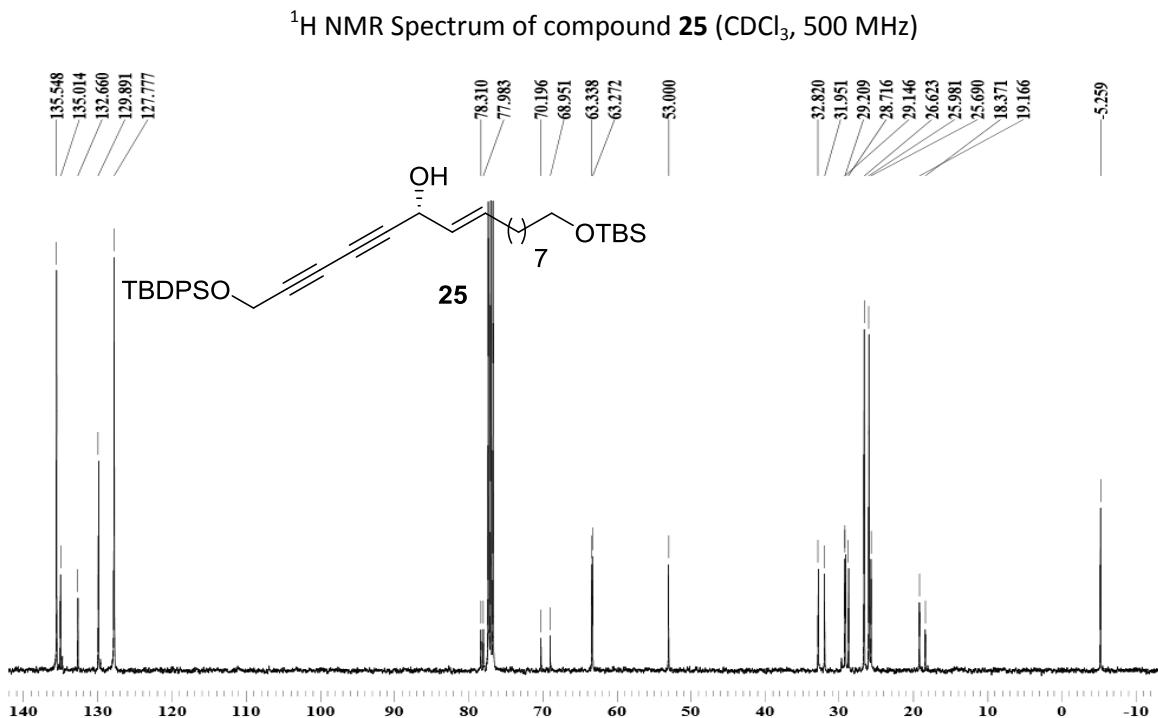
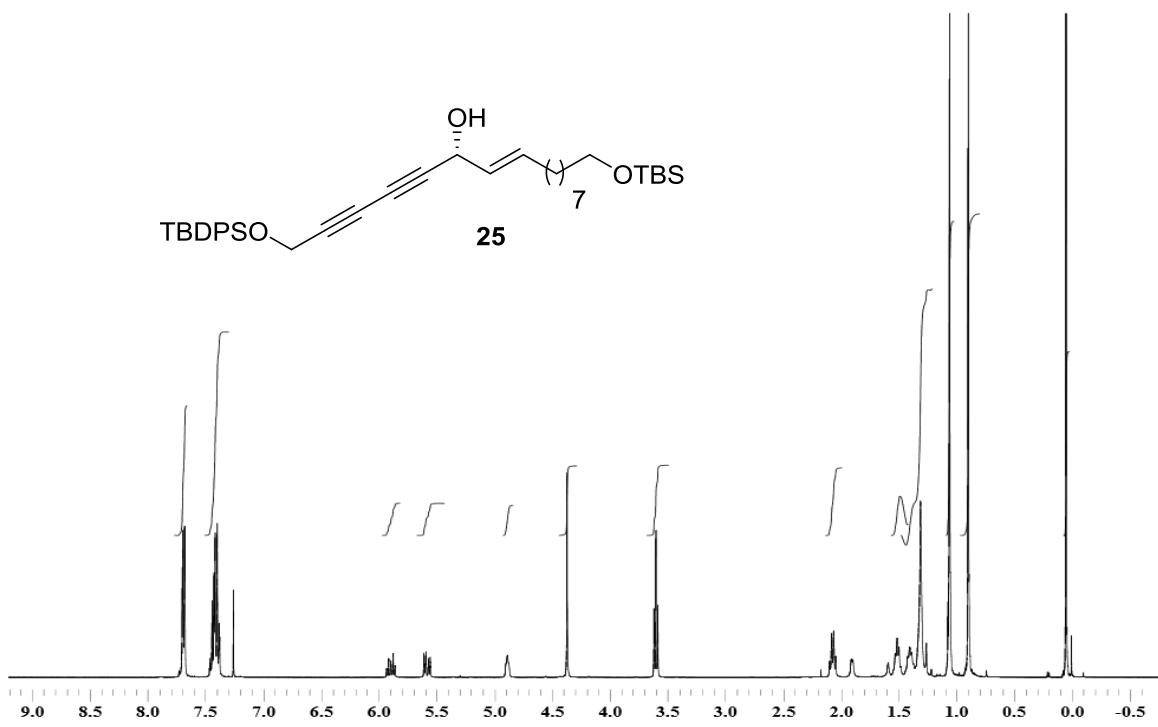
<sup>1</sup>H NMR Spectrum of compound **30** ( $\text{CDCl}_3$ , 500 MHz)

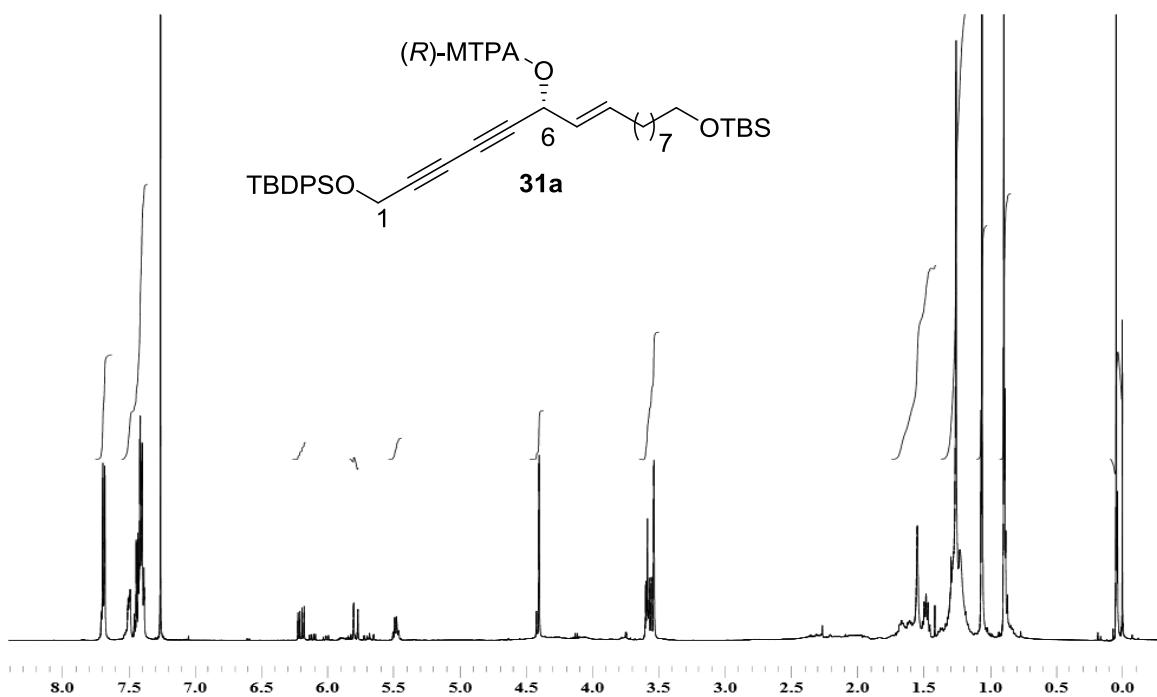


<sup>13</sup>C NMR Spectrum of compound **30** ( $\text{CDCl}_3$ , 125 MHz)

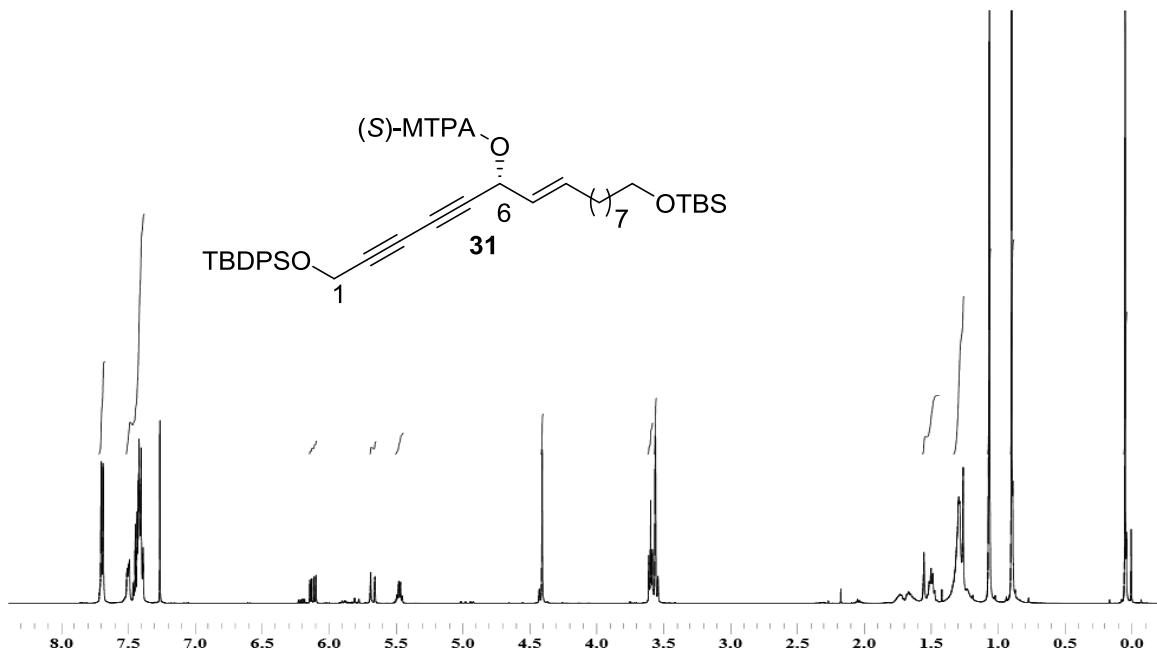




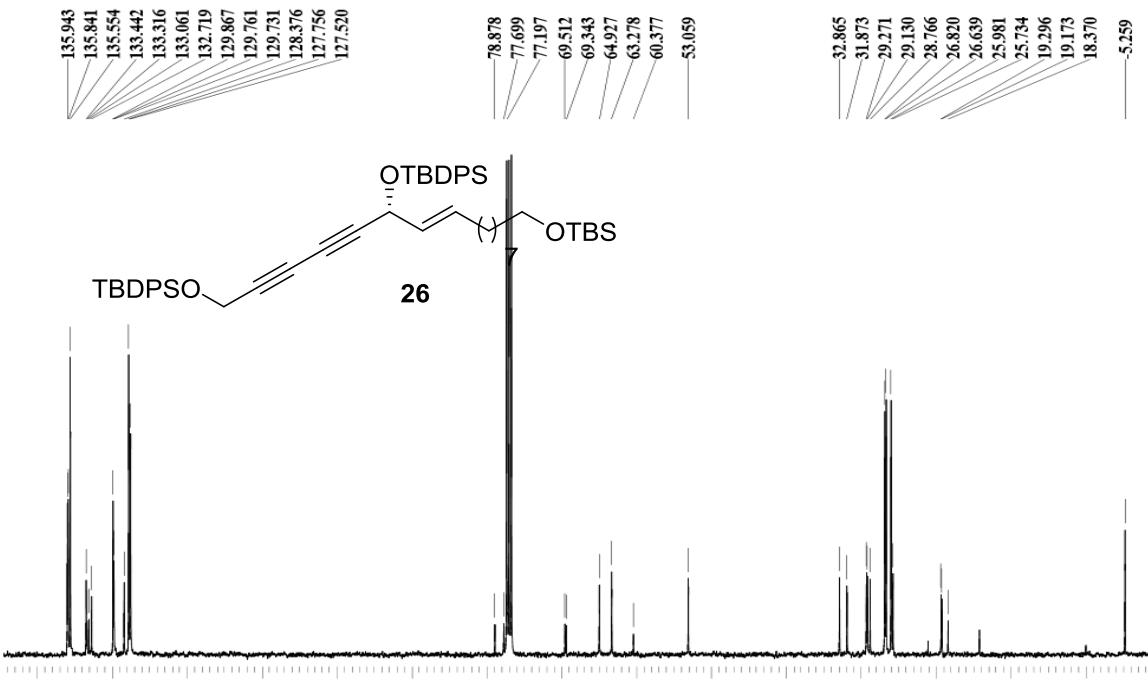
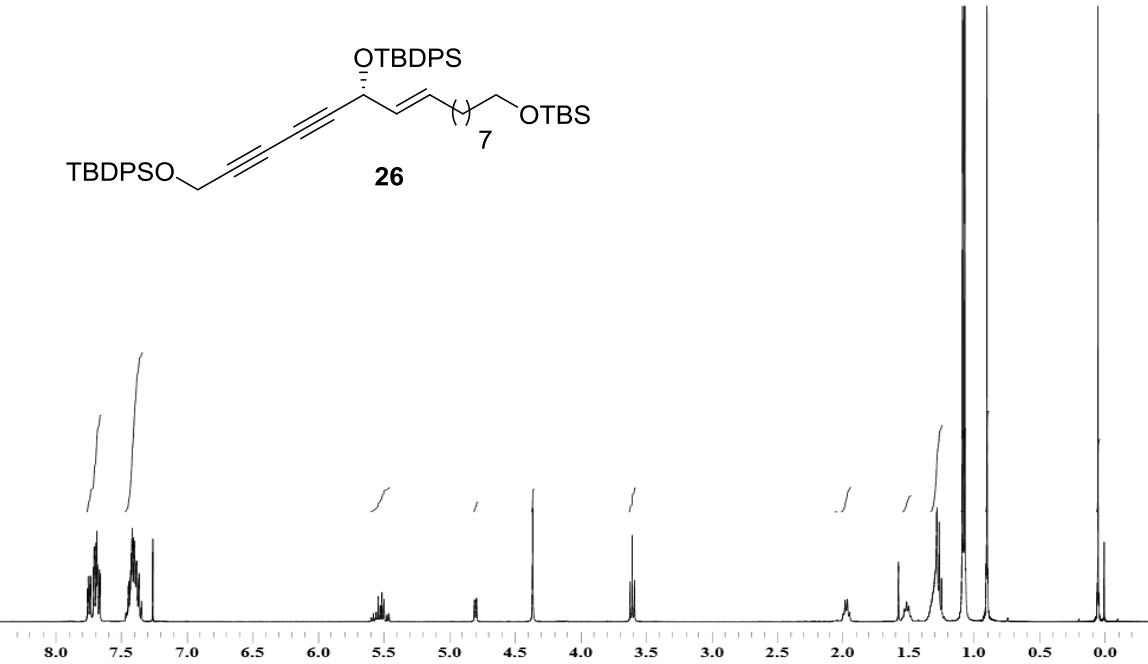


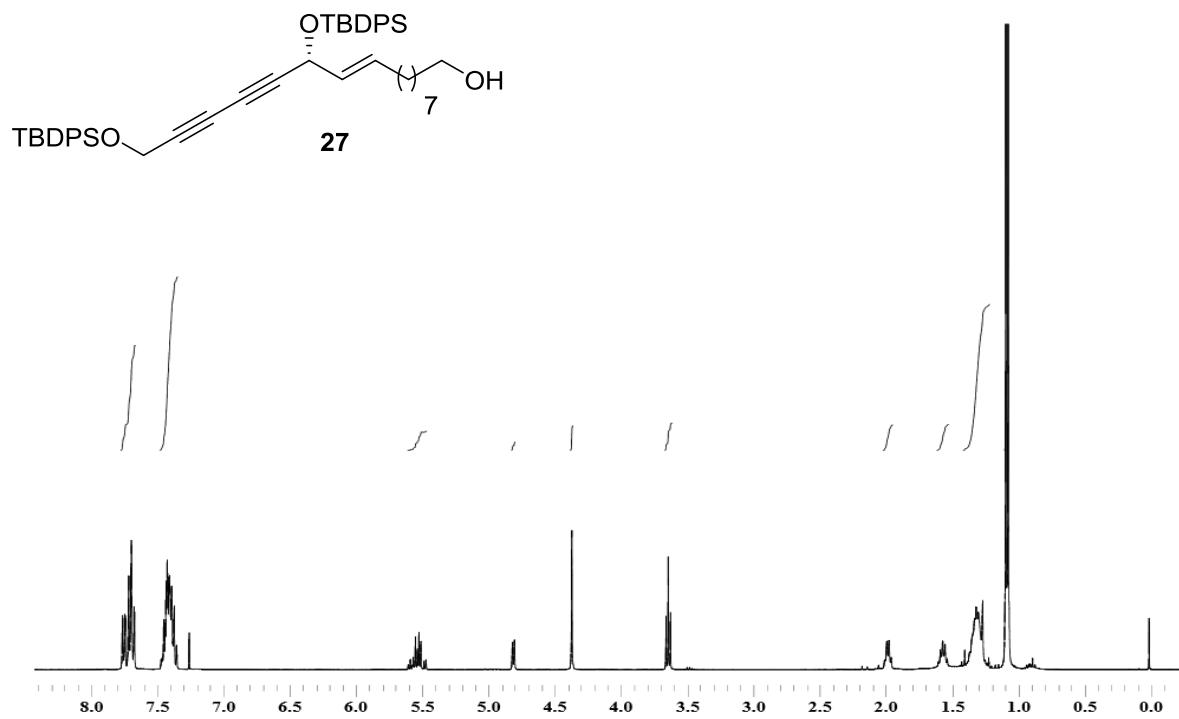


<sup>1</sup>H NMR Spectrum of compound **31a** (CDCl<sub>3</sub>, 500 MHz)

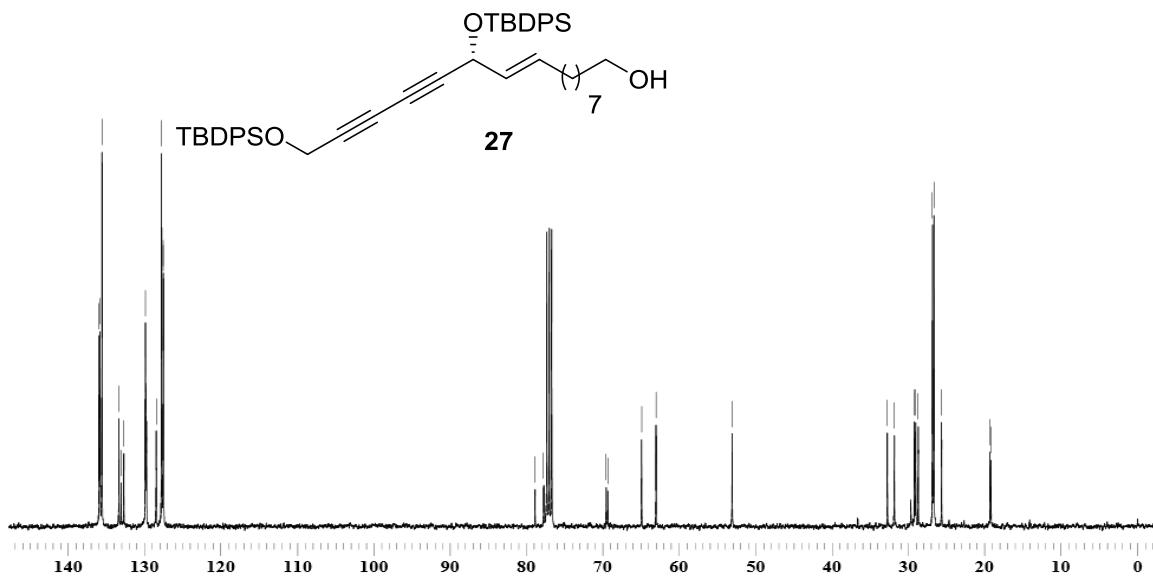


<sup>1</sup>H NMR Spectrum of compound **31** (CDCl<sub>3</sub>, 500 MHz)

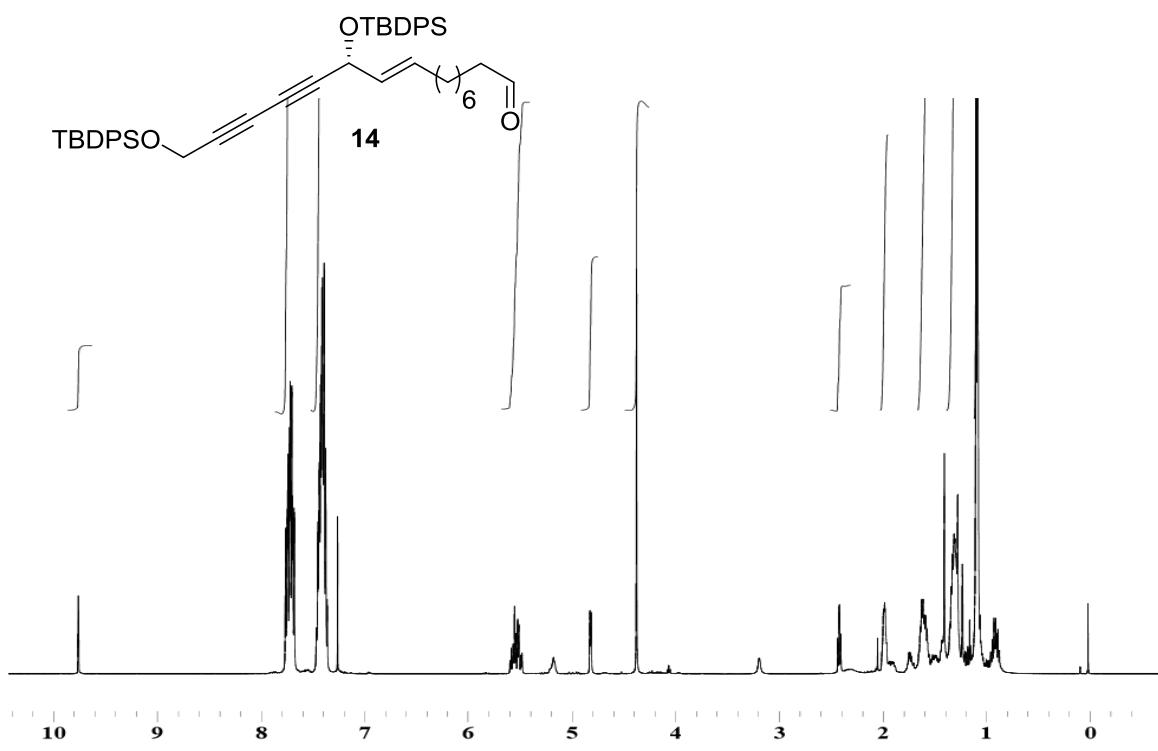




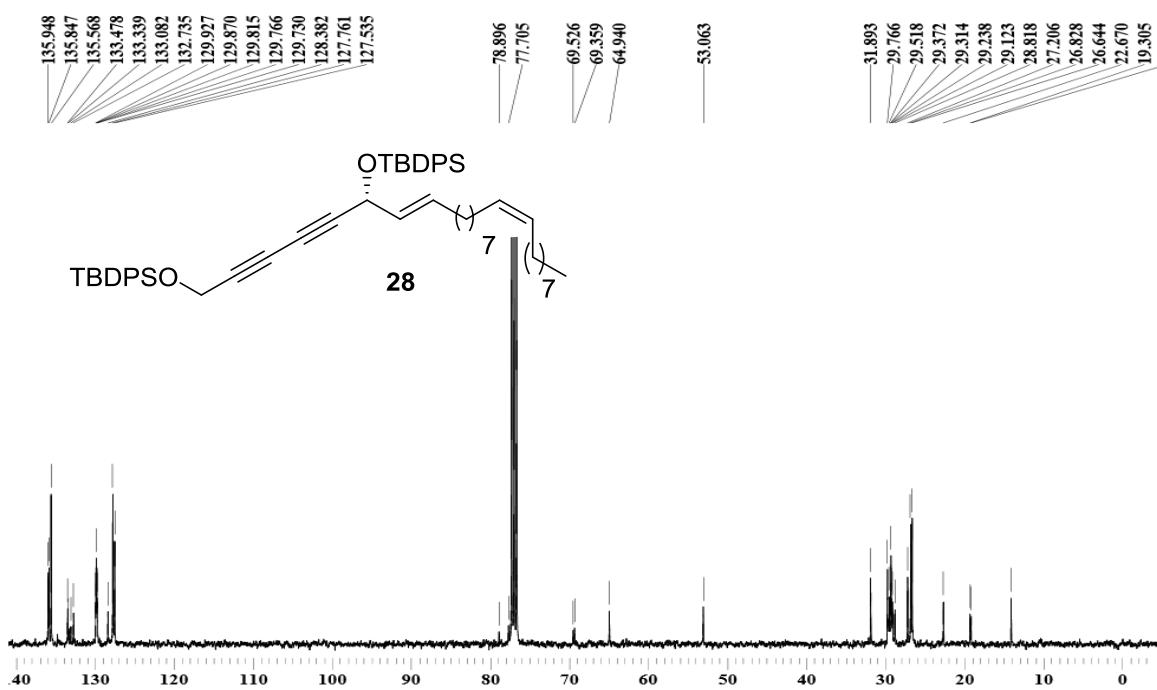
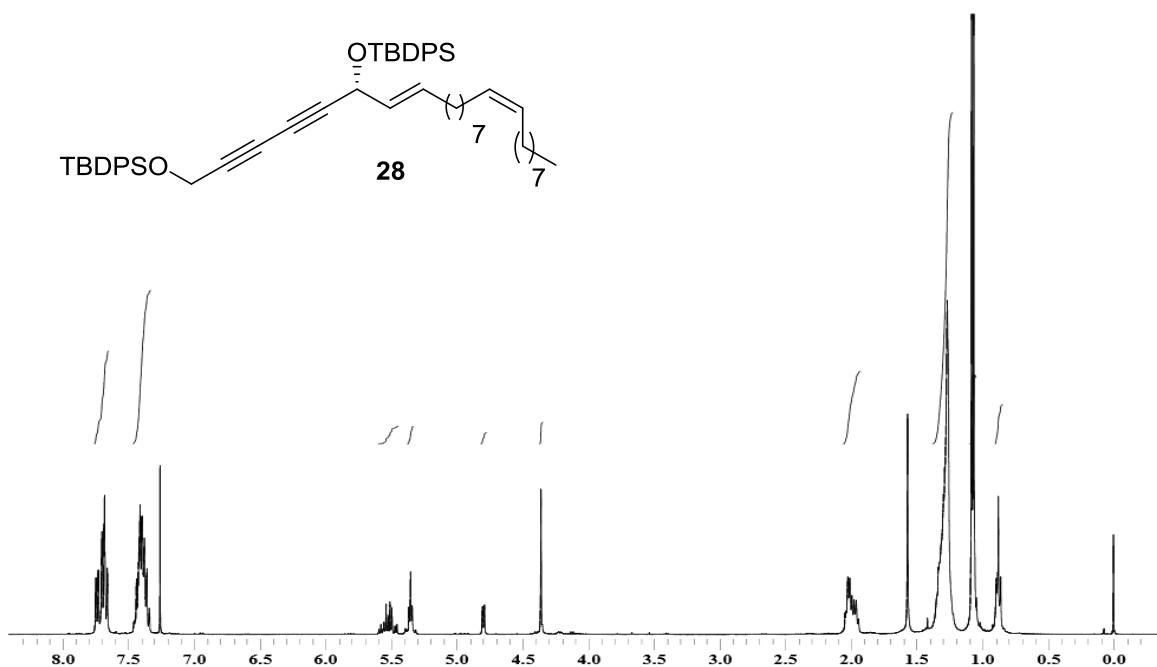
$^1\text{H}$  NMR Spectrum of compound **27** ( $\text{CDCl}_3$ , 400 MHz)



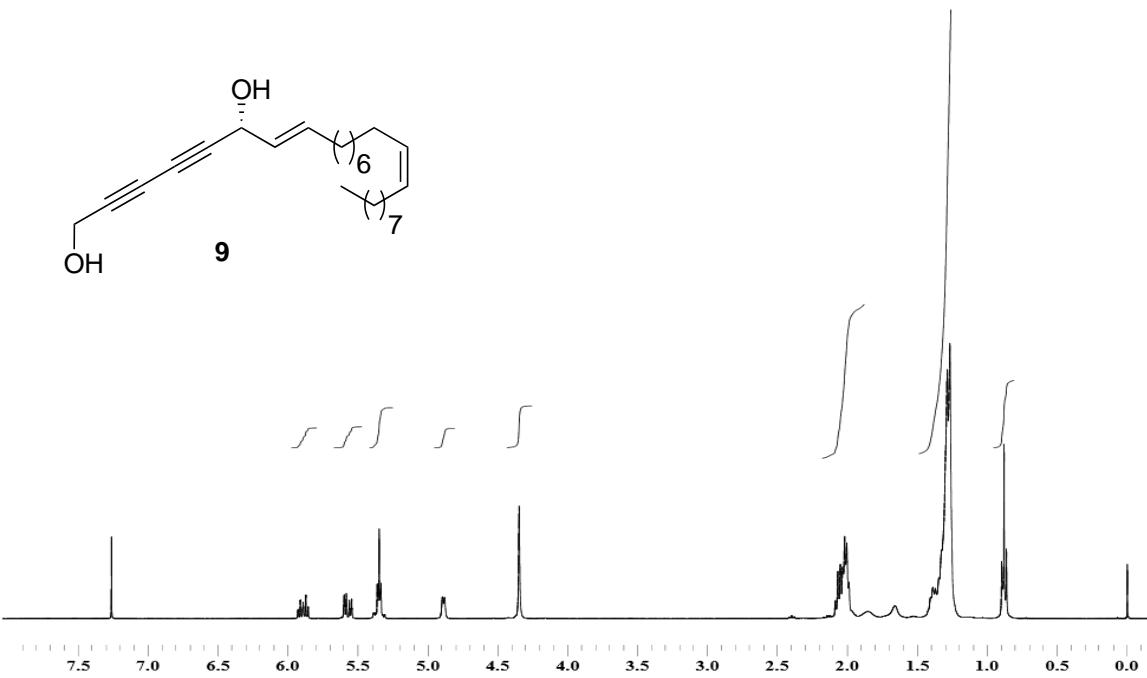
$^{13}\text{C}$  NMR Spectrum of compound **27** ( $\text{CDCl}_3$ , 100 MHz)



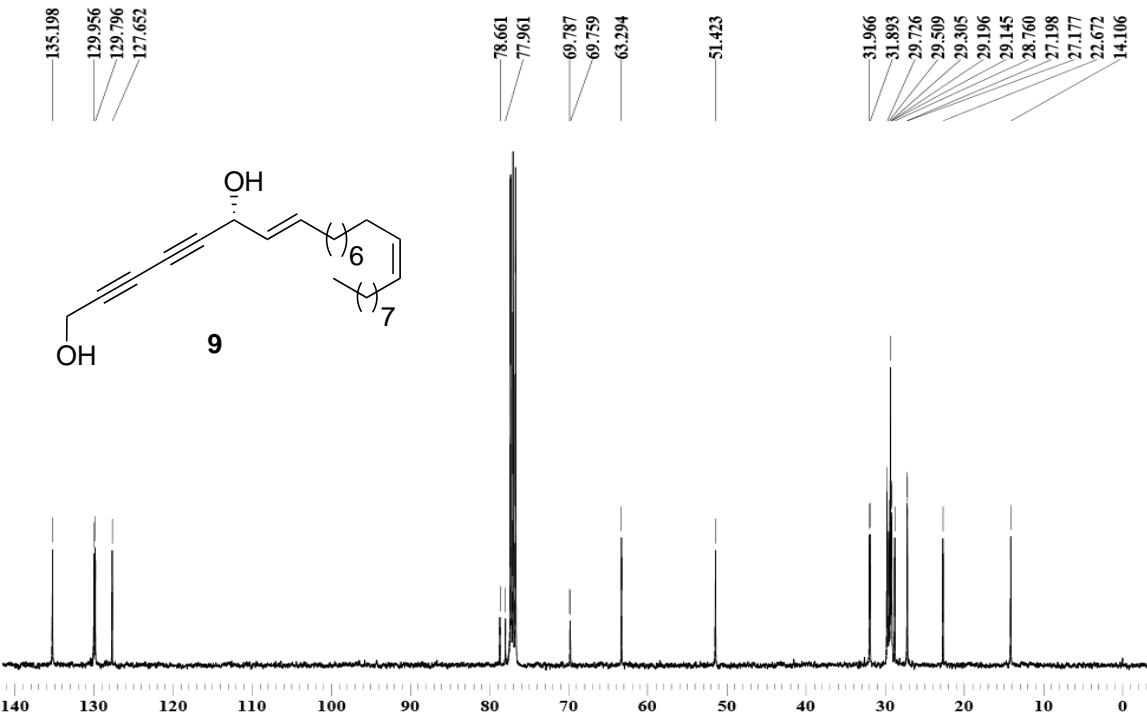
<sup>1</sup>H NMR Spectrum of compound **14** ( $\text{CDCl}_3$ , 400 MHz)



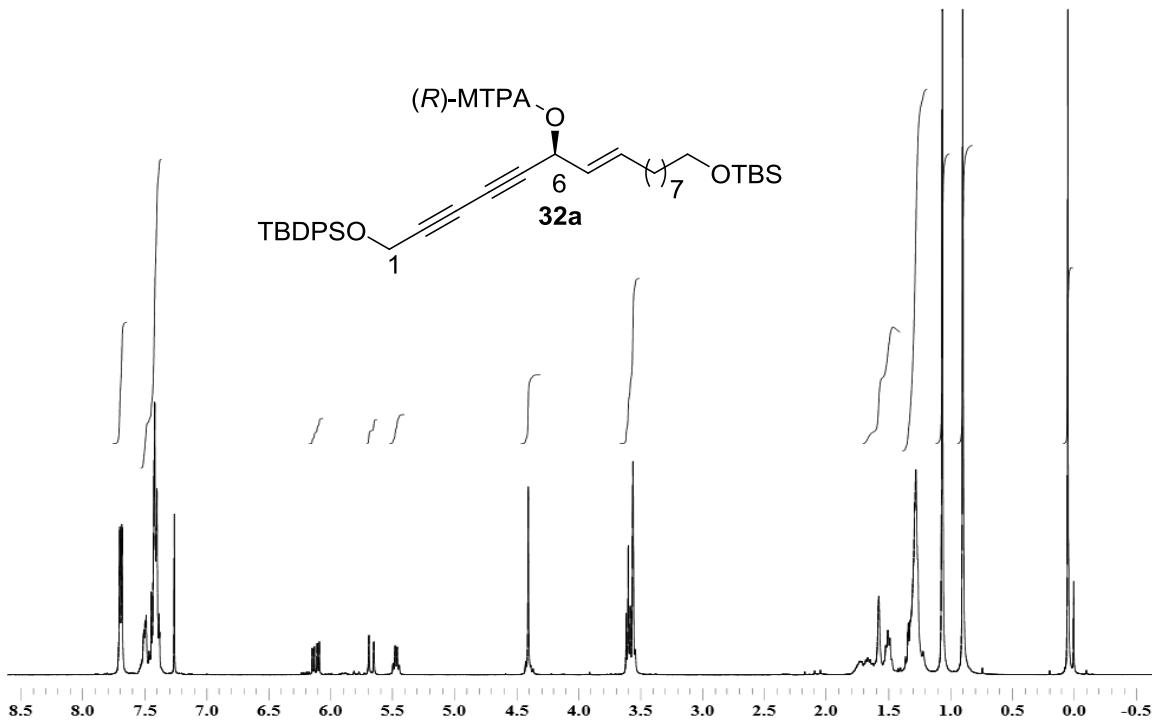
<sup>13</sup>C NMR Spectrum of compound **28** ( $\text{CDCl}_3$ , 125 MHz)



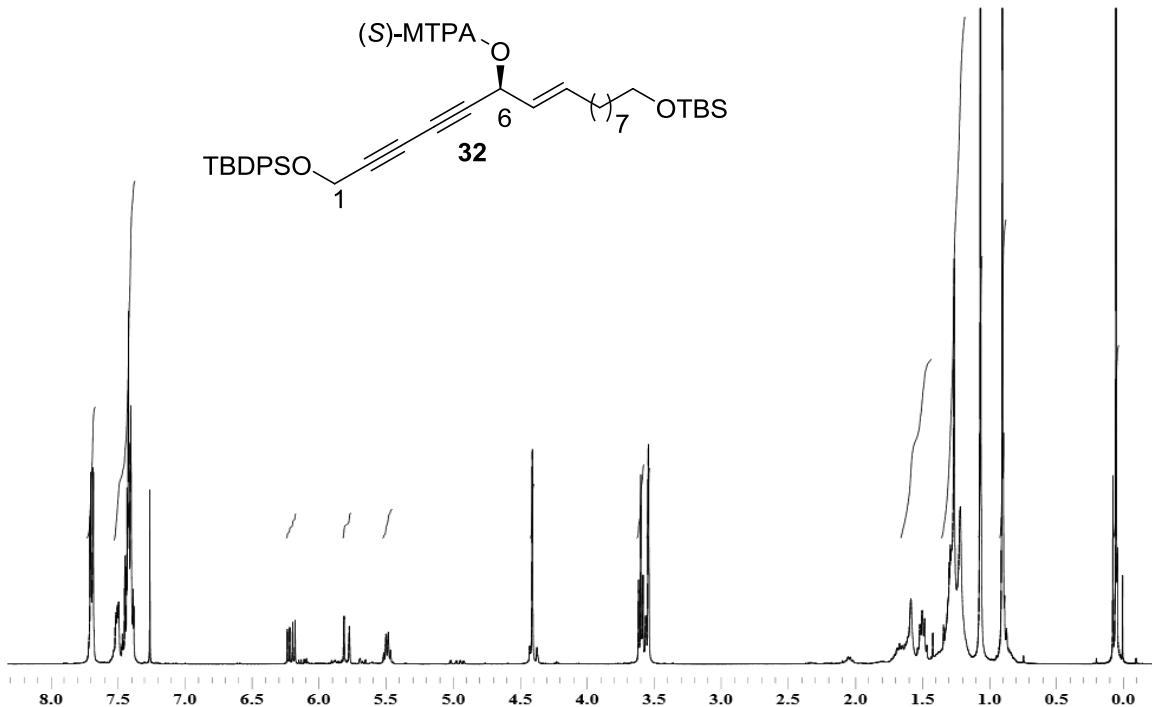
<sup>1</sup>H NMR Spectrum of compound **9** (CDCl<sub>3</sub>, 400 MHz)



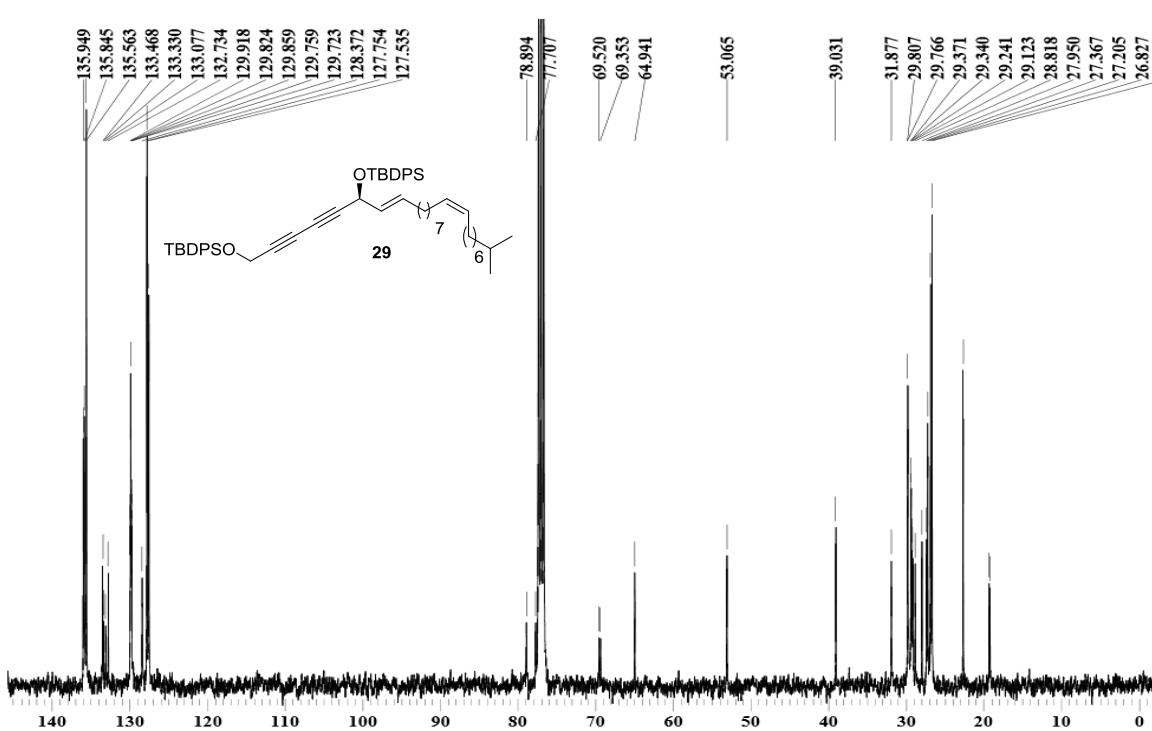
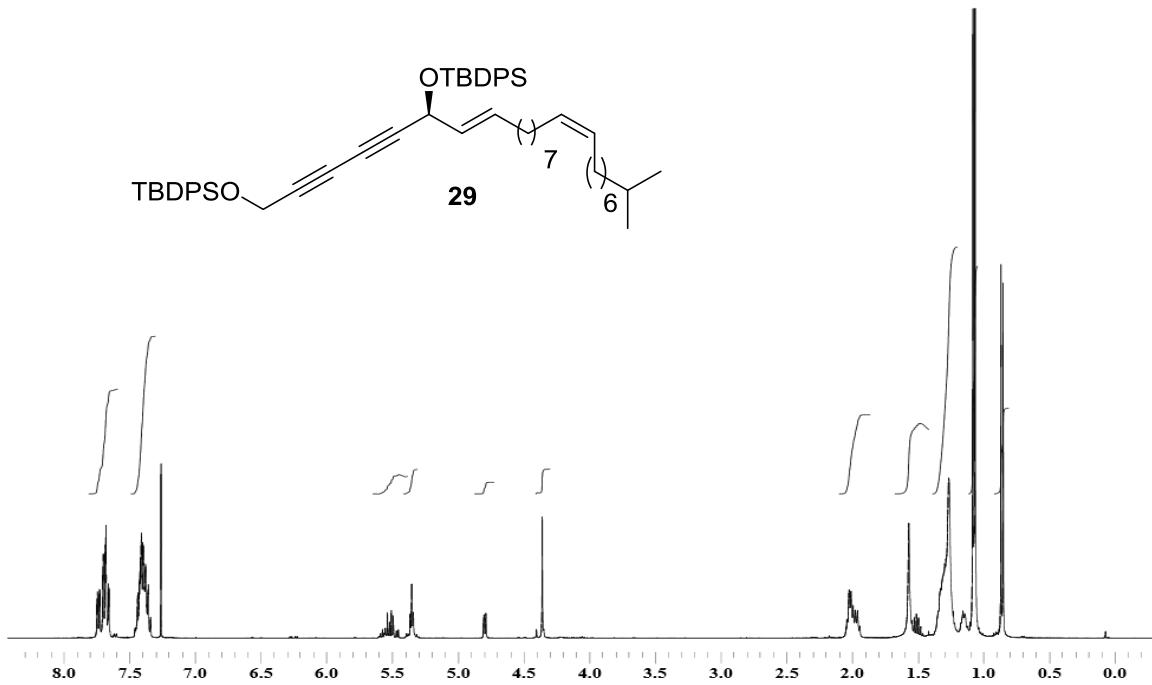
<sup>13</sup>C NMR Spectrum of compound **9** (CDCl<sub>3</sub>, 100 MHz)

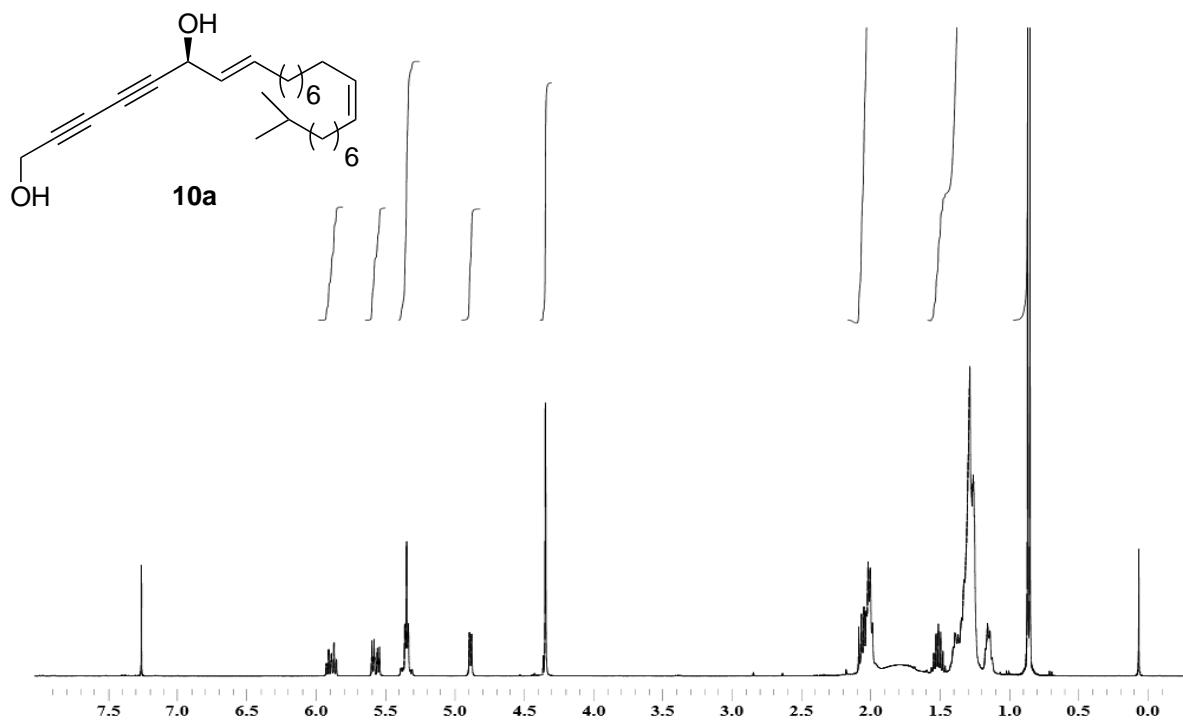


<sup>1</sup>H NMR Spectrum of compound **32a** (CDCl<sub>3</sub>, 500 MHz)

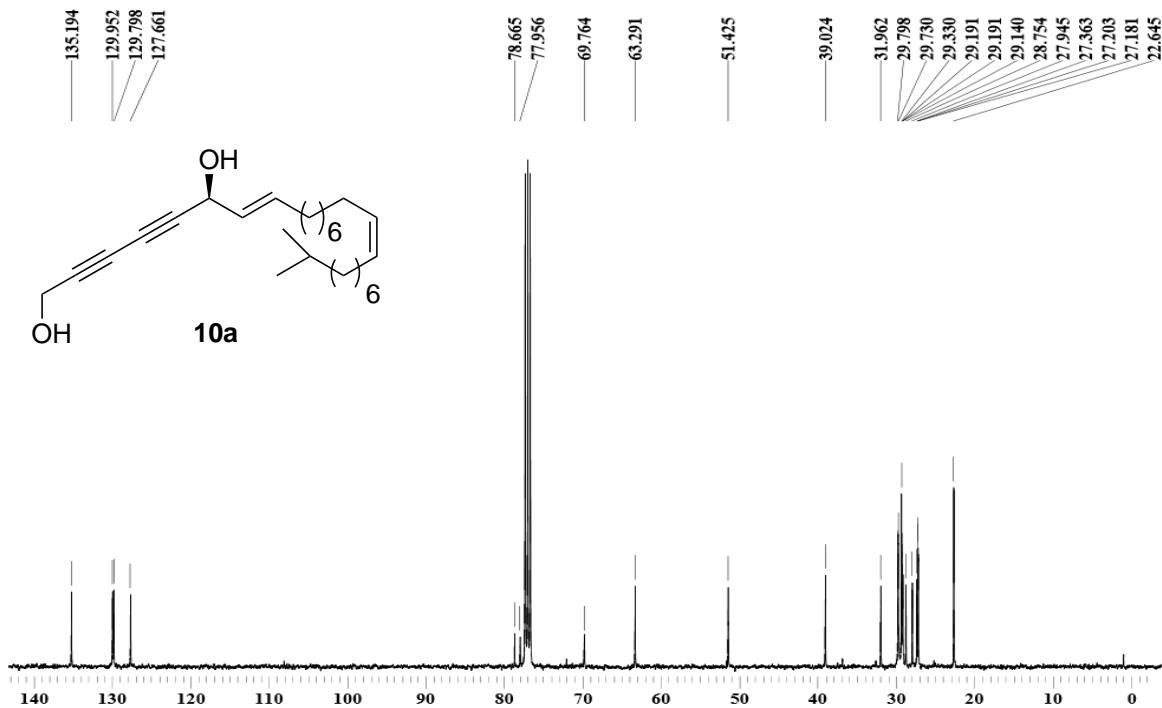


<sup>1</sup>H NMR Spectrum of compound **32** (CDCl<sub>3</sub>, 500 MHz)





$^1\text{H}$  NMR Spectrum of compound **10a** ( $\text{CDCl}_3$ , 500 MHz)



$^{13}\text{C}$  NMR Spectrum of compound **10a** ( $\text{CDCl}_3$ , 125 MHz)

## LCMS analysis of compound **32a**

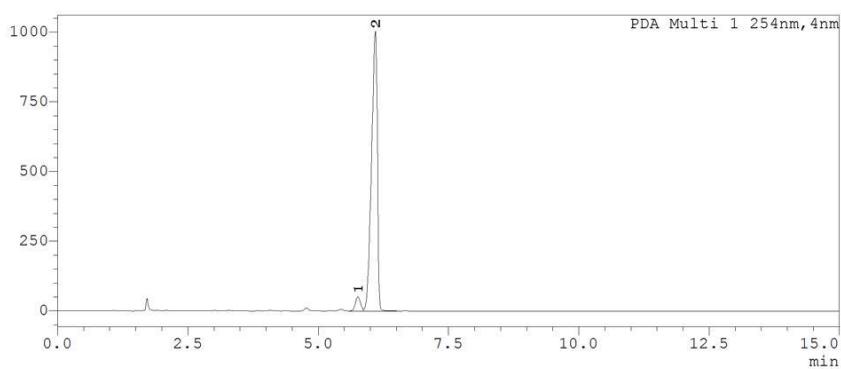


# LC-MS DATA REPORT

*IICT-DNPC*

Sample Code : PSH-RMOS-832  
 Data File : 190717.3.lcd  
 Method : LC-MS -KSB.lcm  
 Injection Volume : 5  
 Date Acquired : 7/19/2017 1:11:16 PM  
 Report File : LC-MS Data Report.lsr  
 Chromatographic Conditions : Column:KINETEX-F5 (150 X 4.6mm, 5.0 $\mu$ m )  
 Mobile Phase: 90%ACN IN 0.1 F.A  
 Flow Rate: 1.0 mL/min

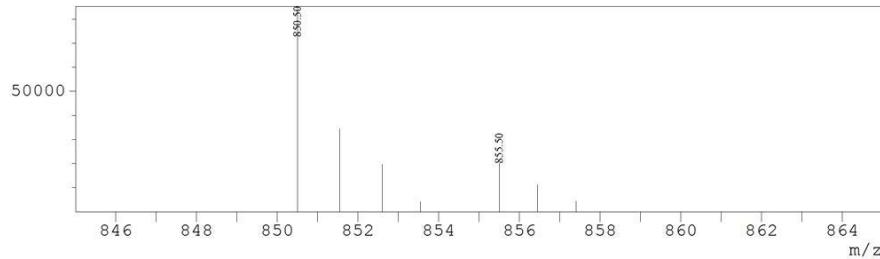
mAU



Peak Table

PDA Ch1 254nm					
Peak#	Ret. Time	Peak Start	Peak End	Area	Area%
1	5.762	5.589	5.867	349007	4.265
2	6.097	5.867	6.560	7833143	95.735
Total				8182150	100.000

Q1 Scan Positive+  
 \$If\$(SpPrTab==SpPrTab) Spectrum Mode:Averaged 5.662-5.870(1581-1639)  
 BG Mode:Averaged 0.000-5.160(1-1441)



REPORT