

Supporting Information

Cu(I)-Catalyzed Coupling of Bis(trimethylsilyl)diazomethane with Terminal Alkynes: A Synthesis of 1,1-Disilyl Allenes

Shuai Xu,[†] Ri Chen,[†] Zihao Fu,[†] Yunpeng Gao[†] and Jianbo Wang^{*,†,‡}

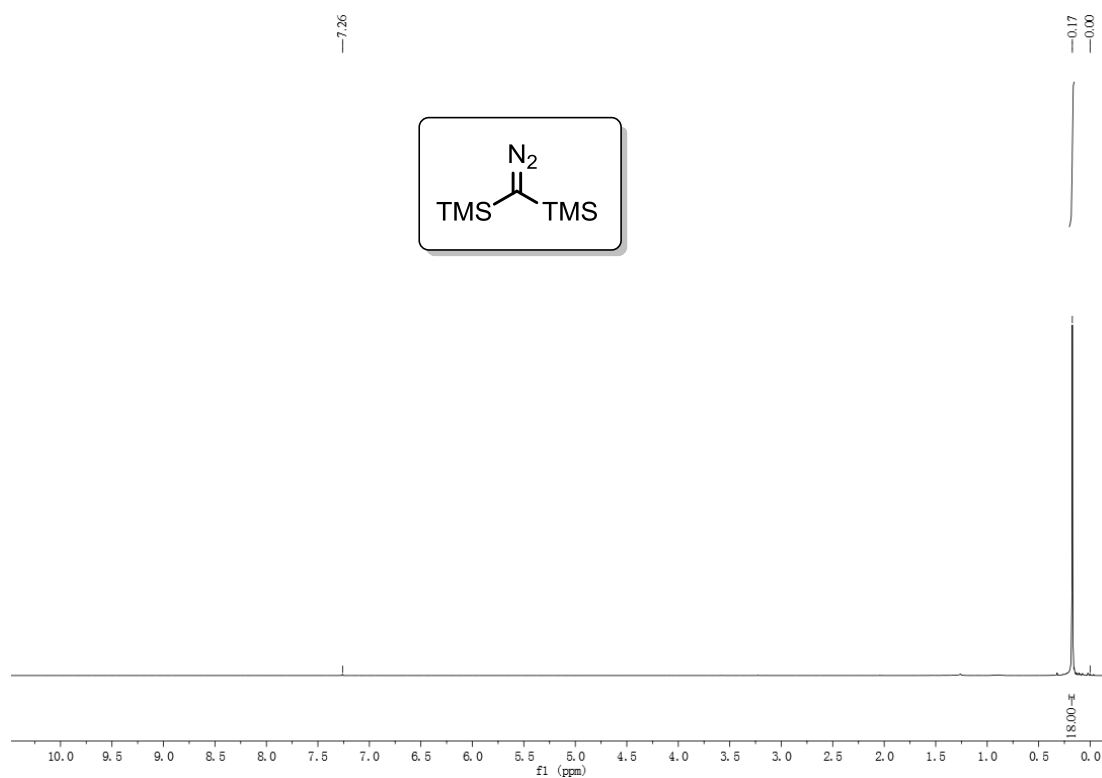
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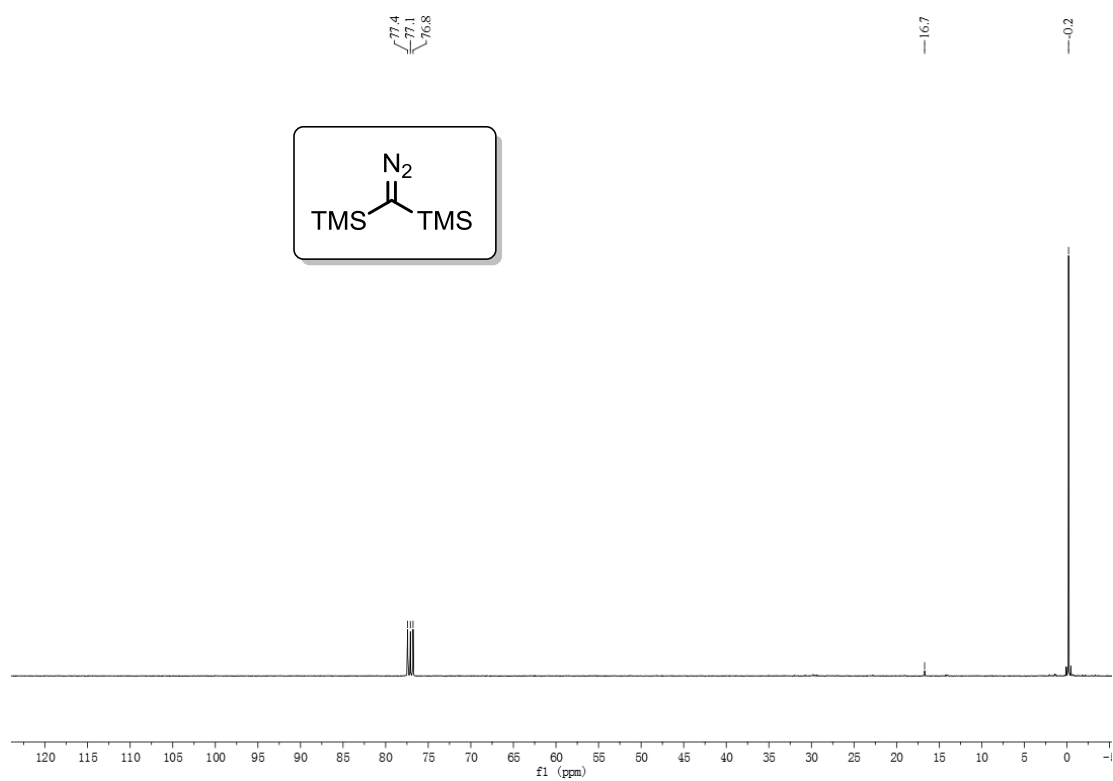
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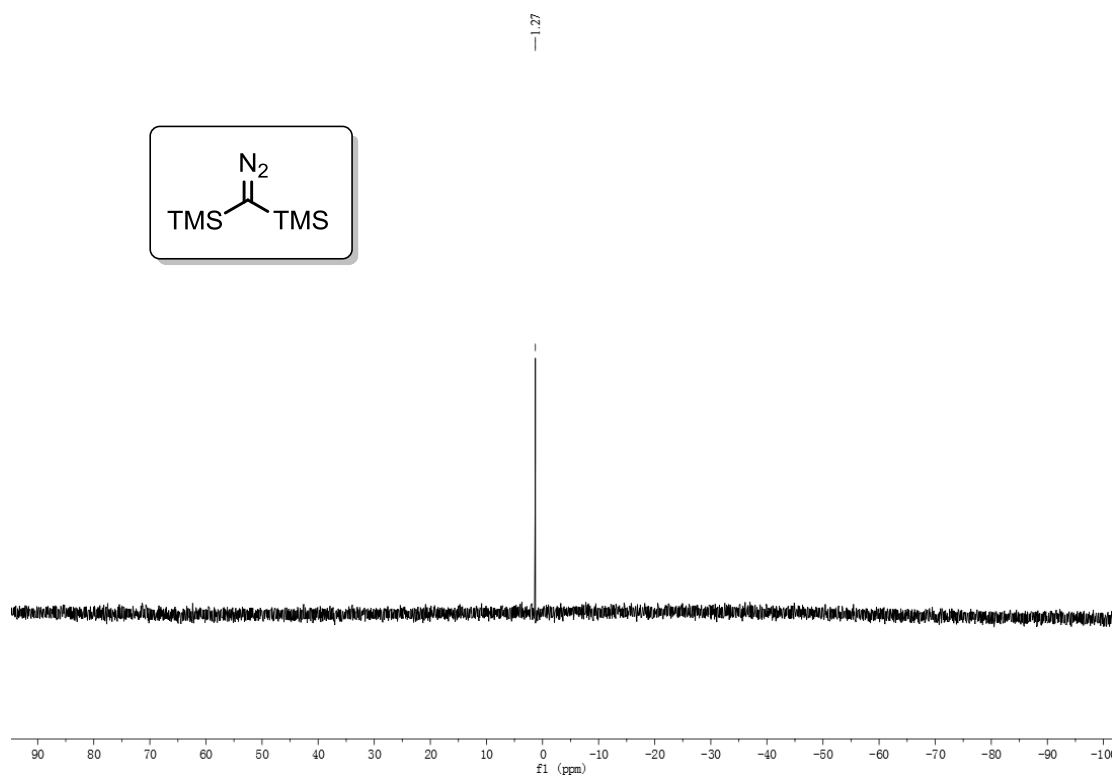
¹H NMR Spectrum of bis(trimethylsilyl)diazomethane 1



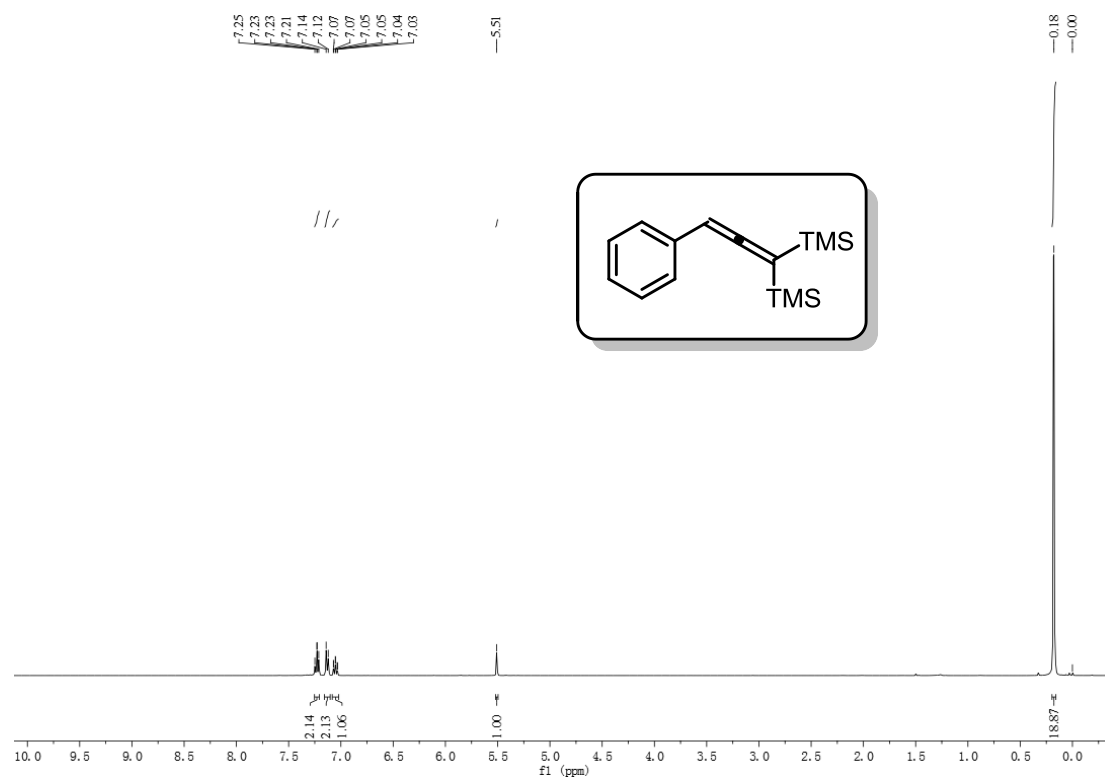
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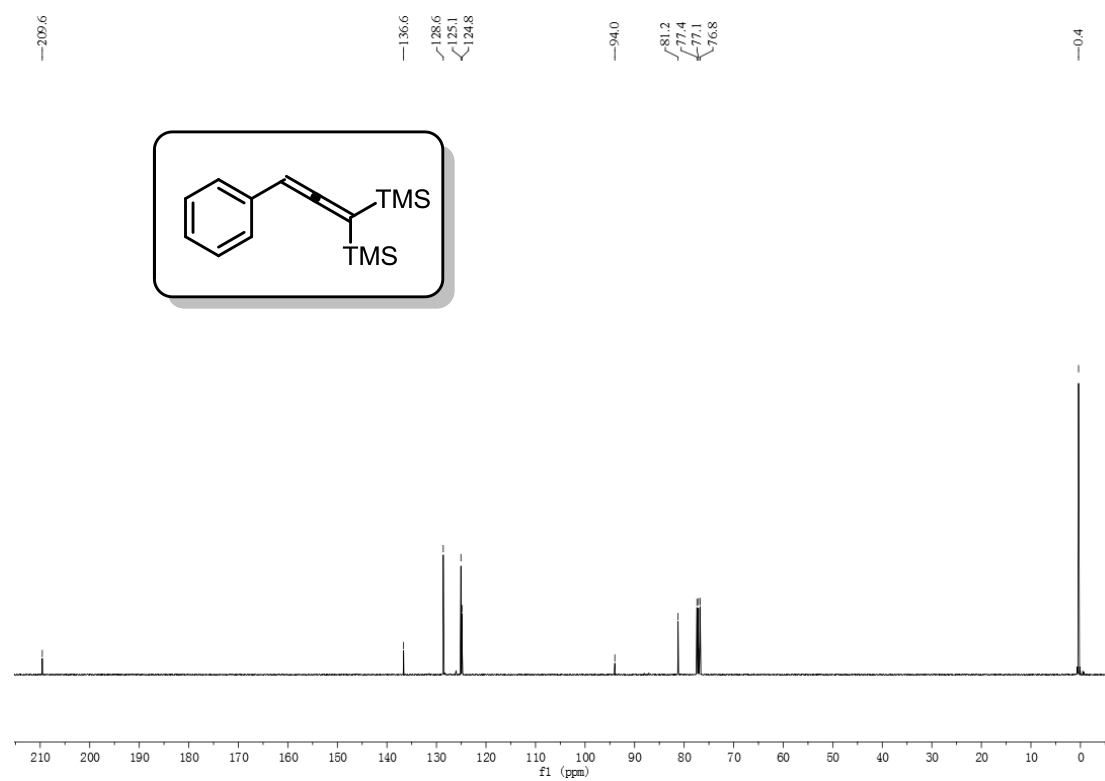
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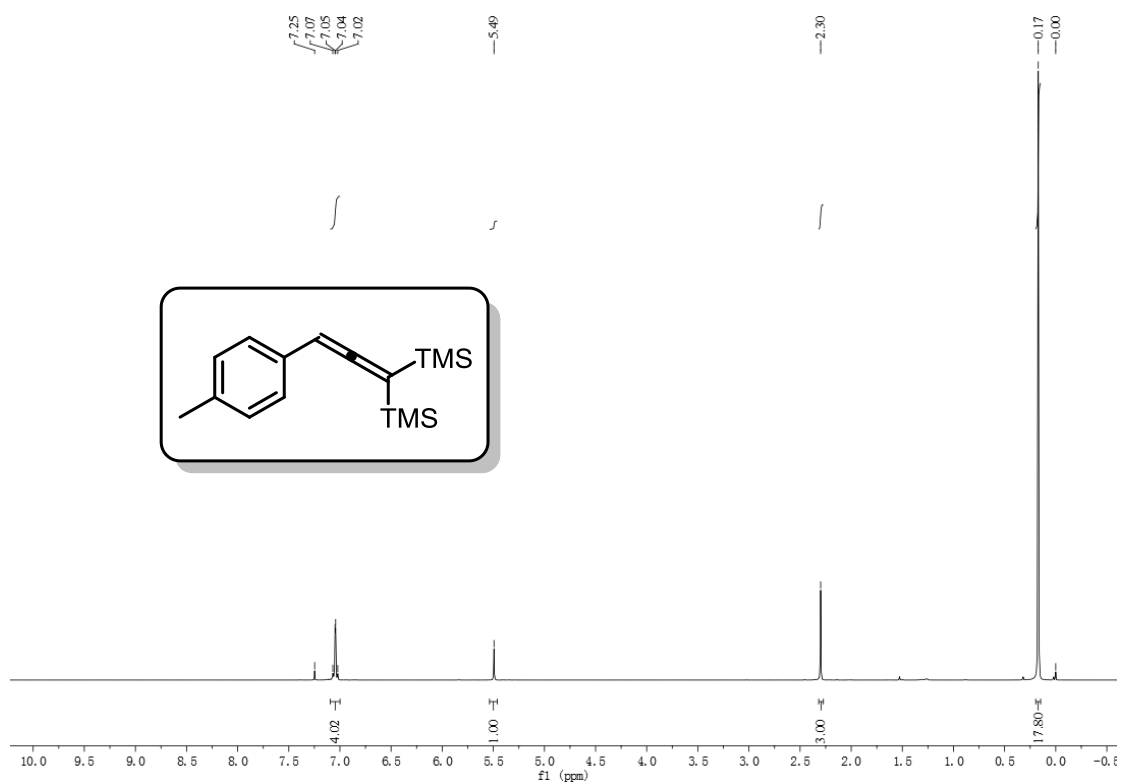
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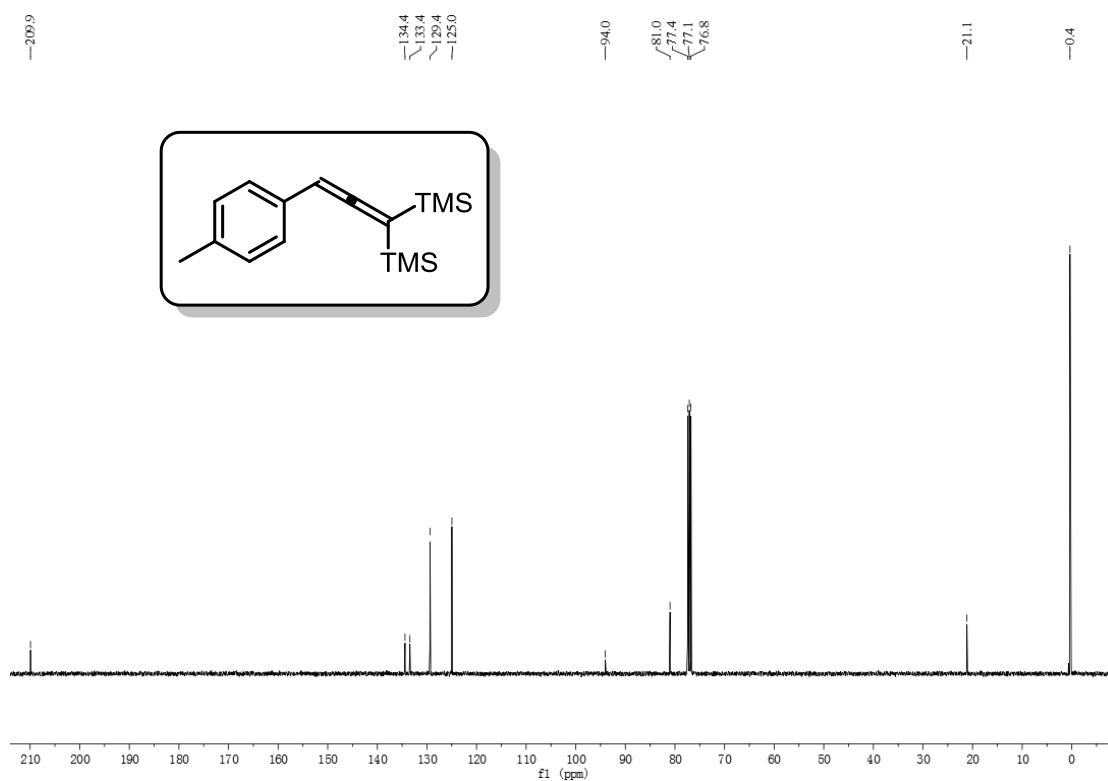
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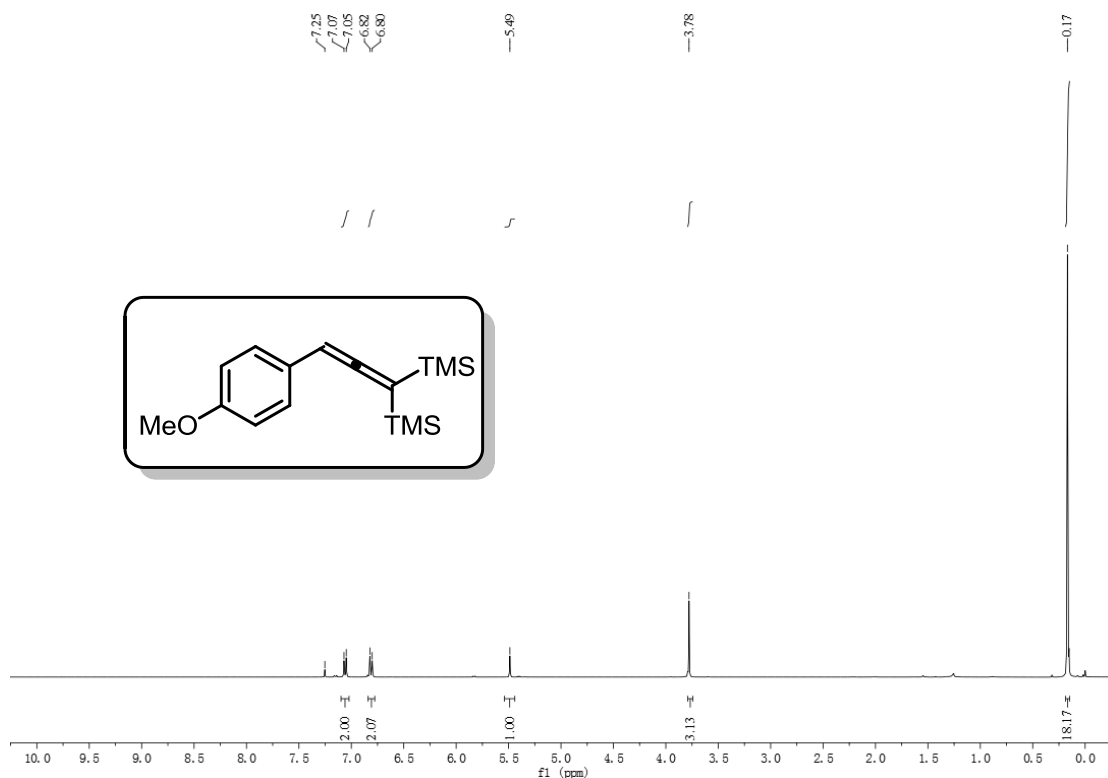


^{13}C NMR Spectrum of (3-(*p*-tolyl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane) 3b



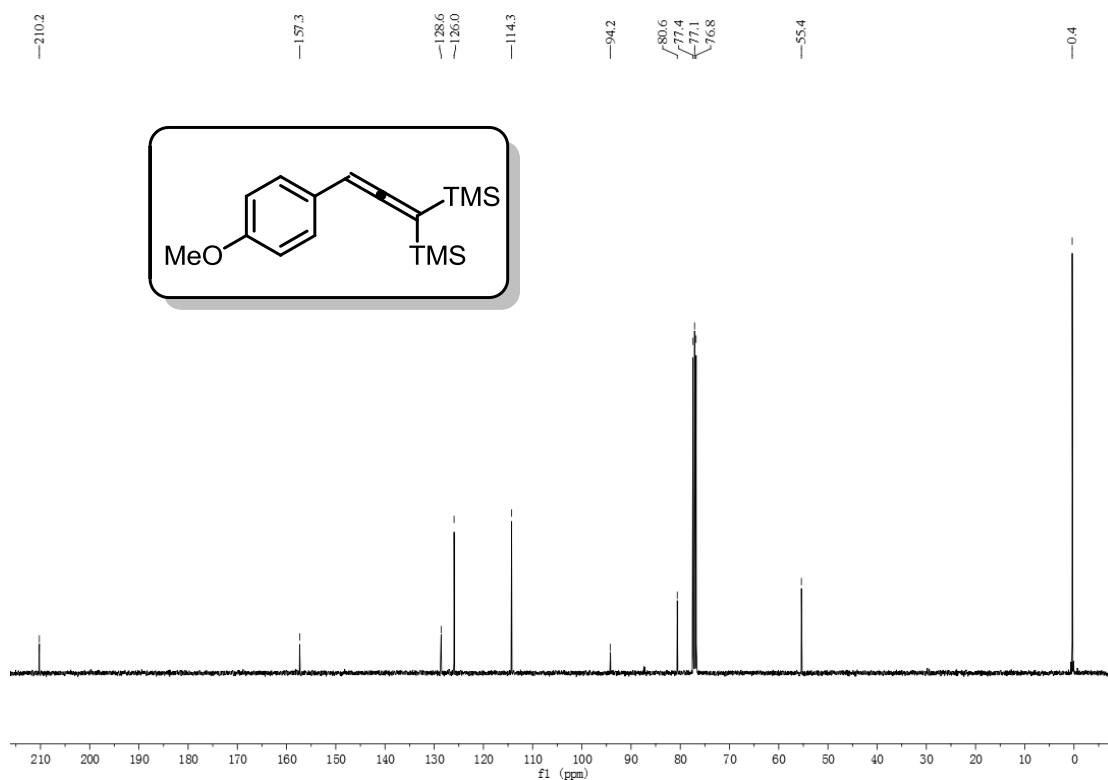
¹H NMR Spectrum of (3-(4-methoxyphenyl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane)

3c



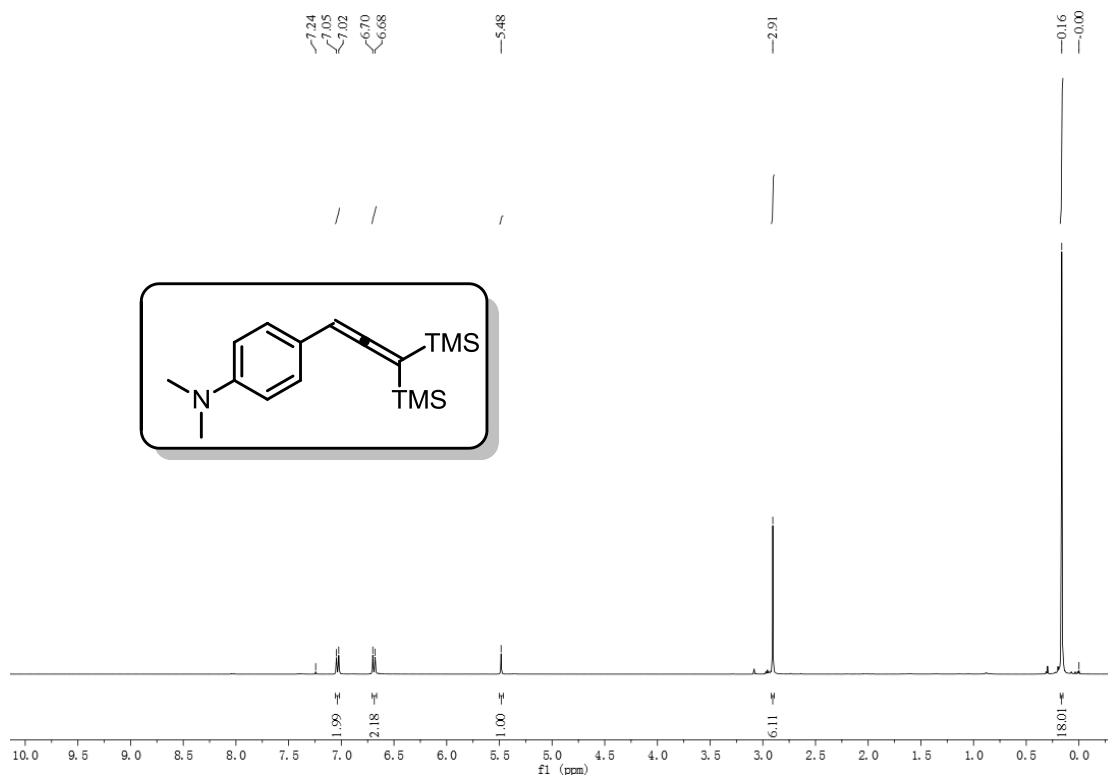
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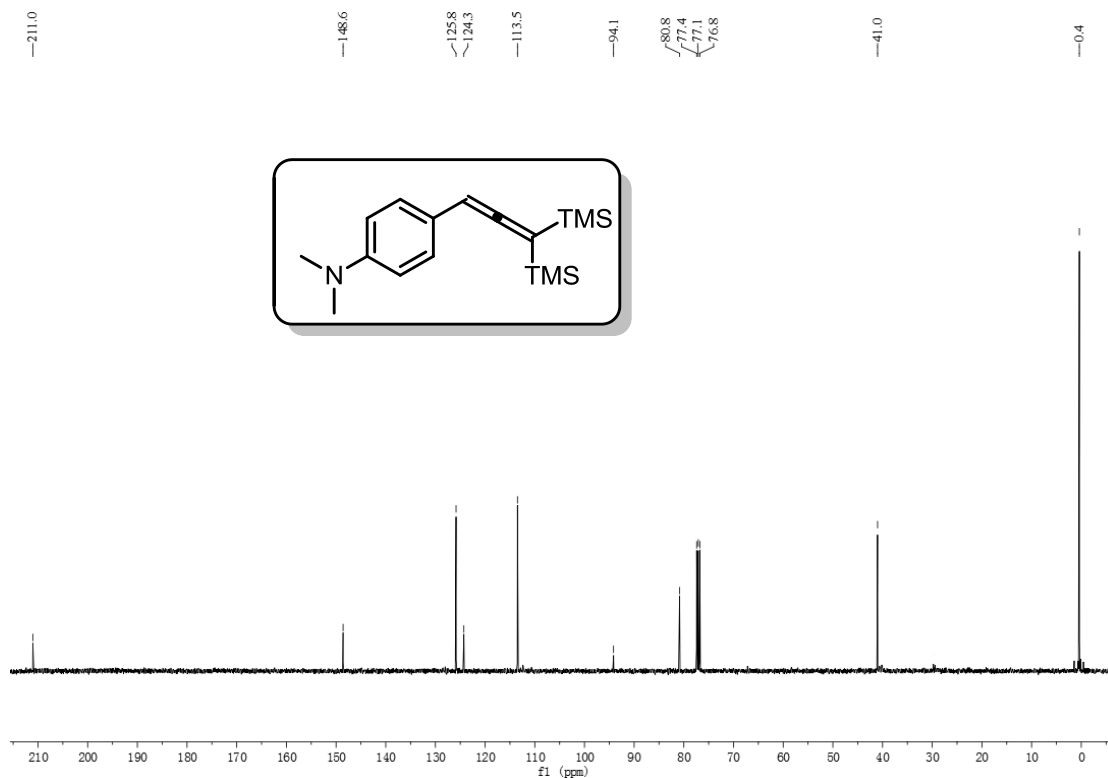
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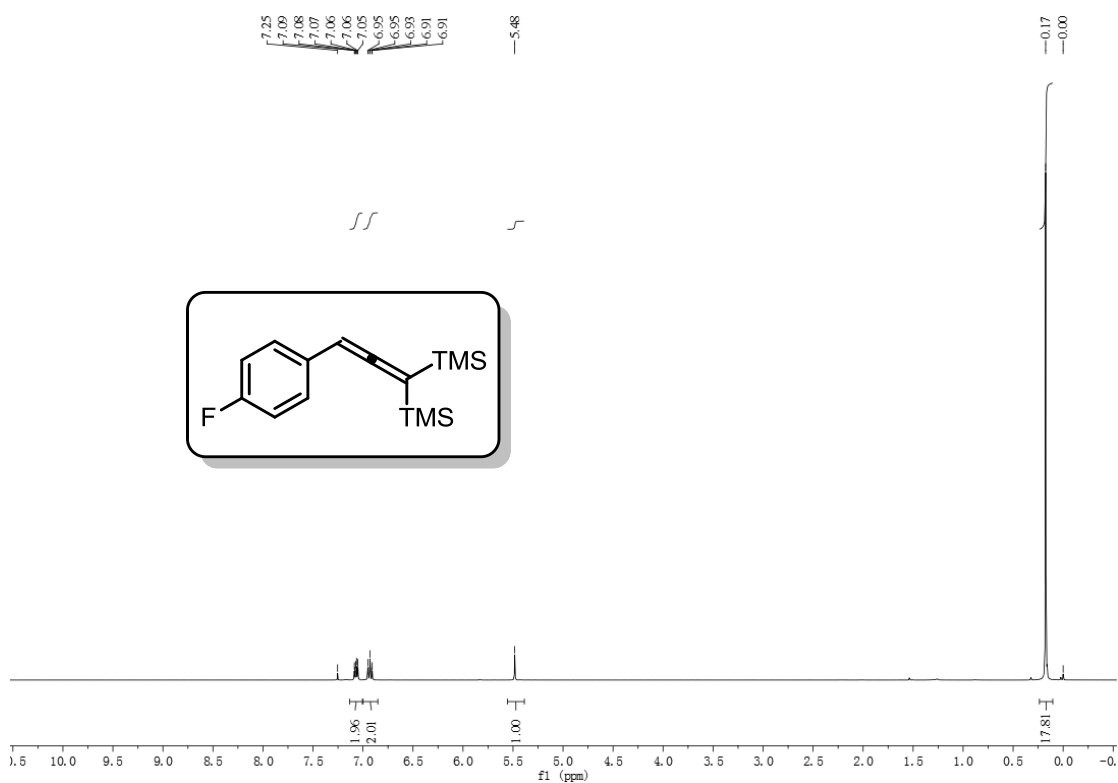


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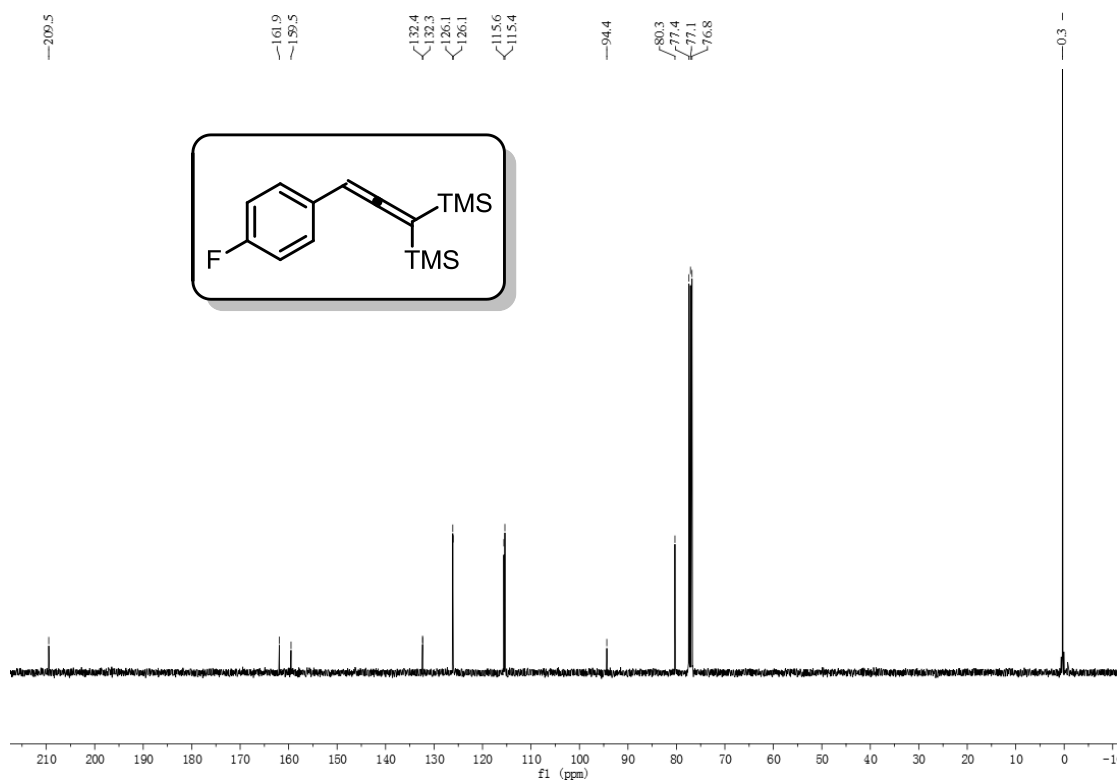


¹H NMR Spectrum of (3-(4-fluorophenyl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane) 3e

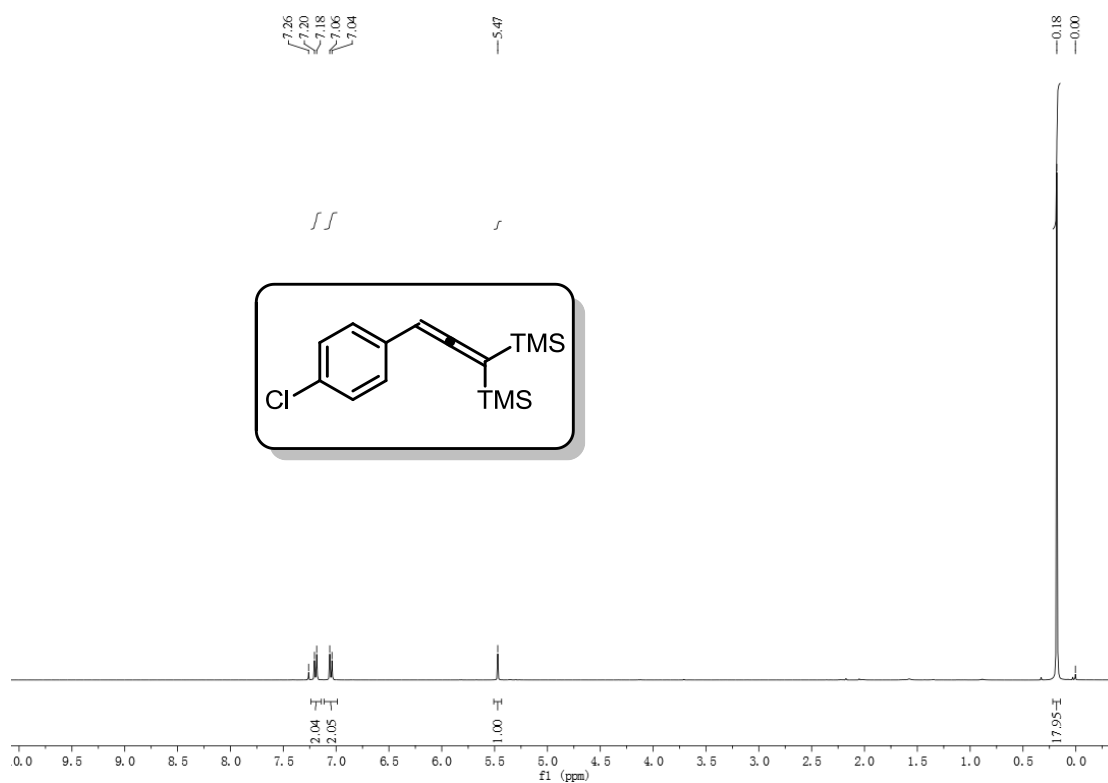


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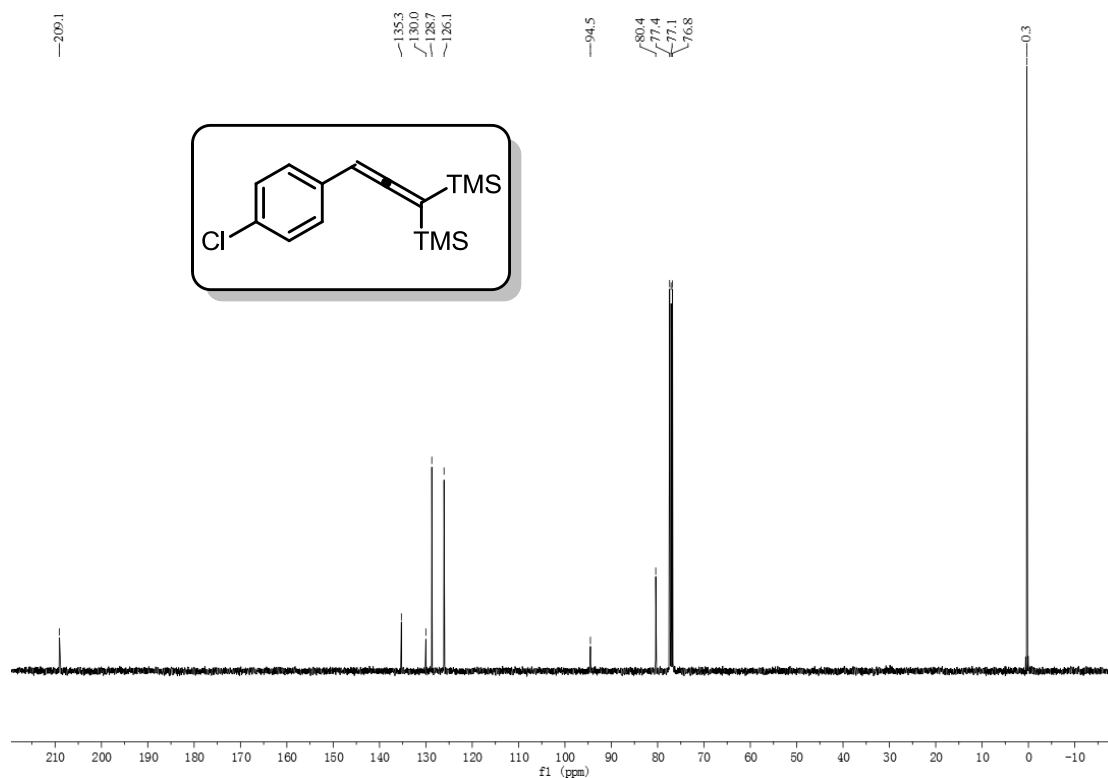
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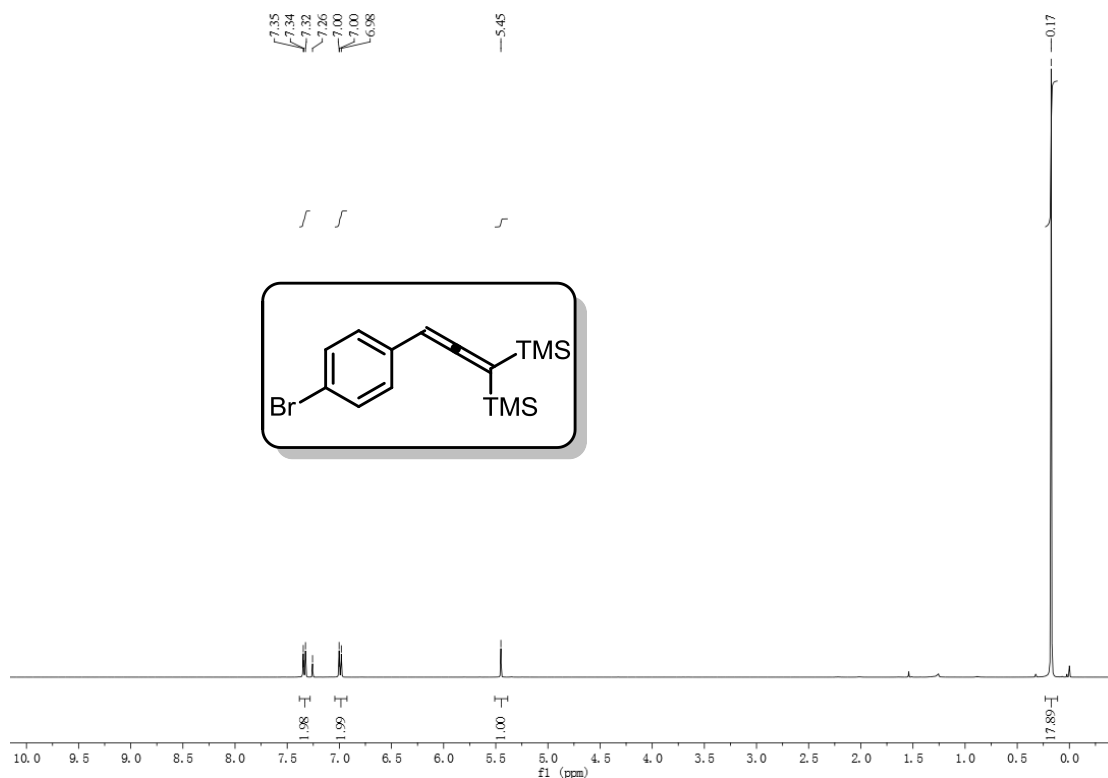


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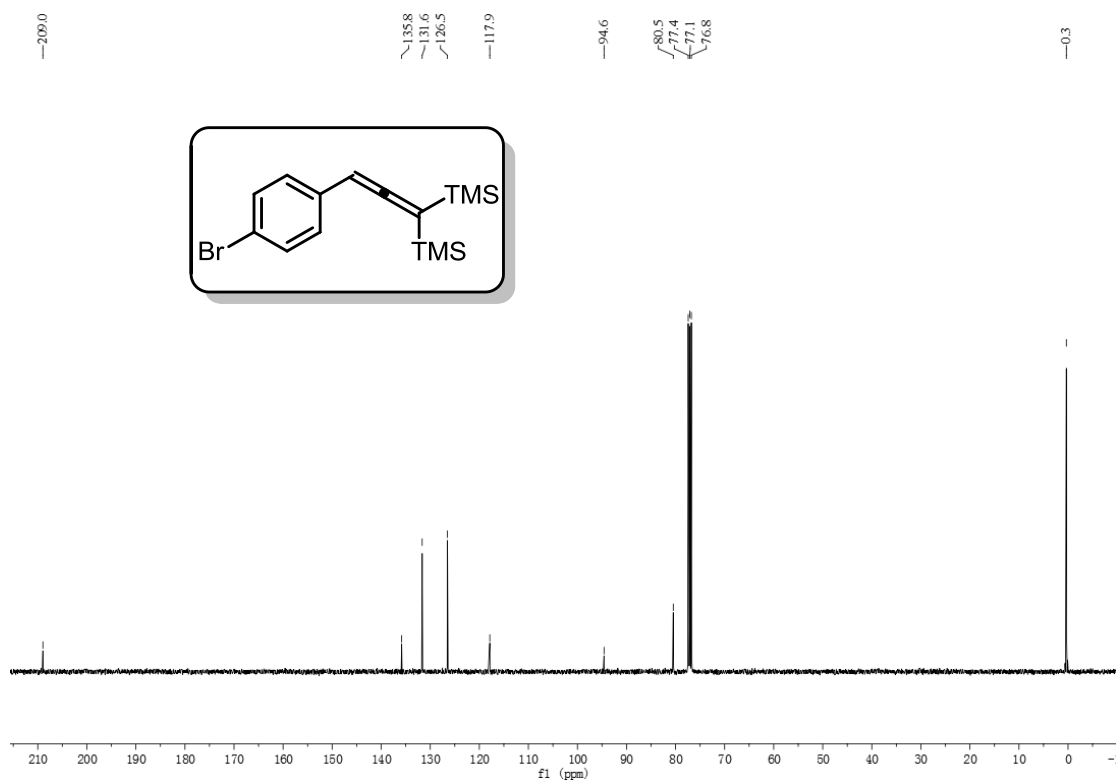
¹H NMR Spectrum of (3-(4-bromophenyl)propa-1,2-diene-1,1-diyl) bis(trimethylsilane)

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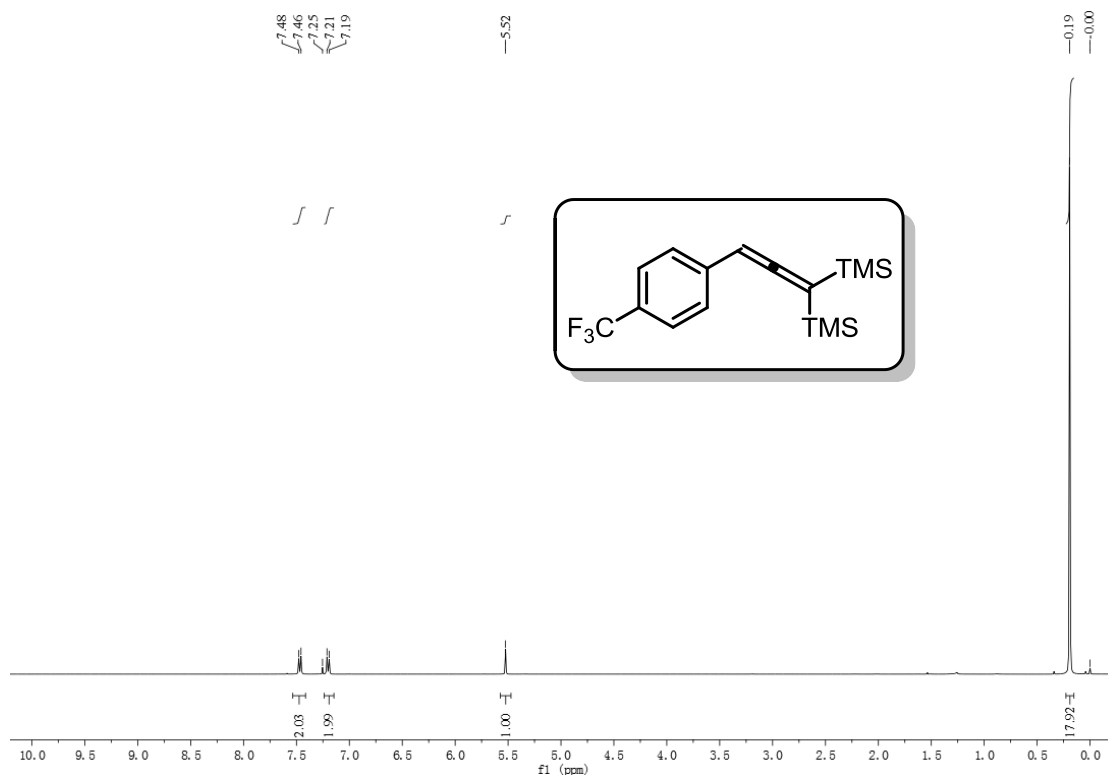


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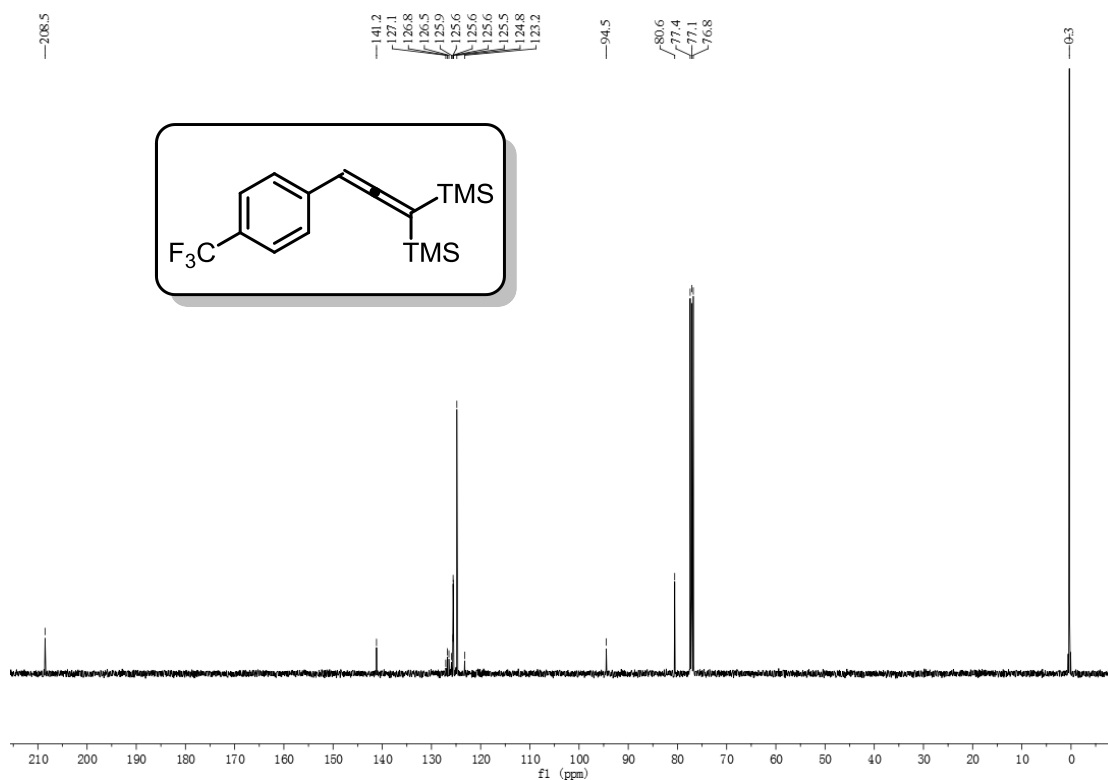
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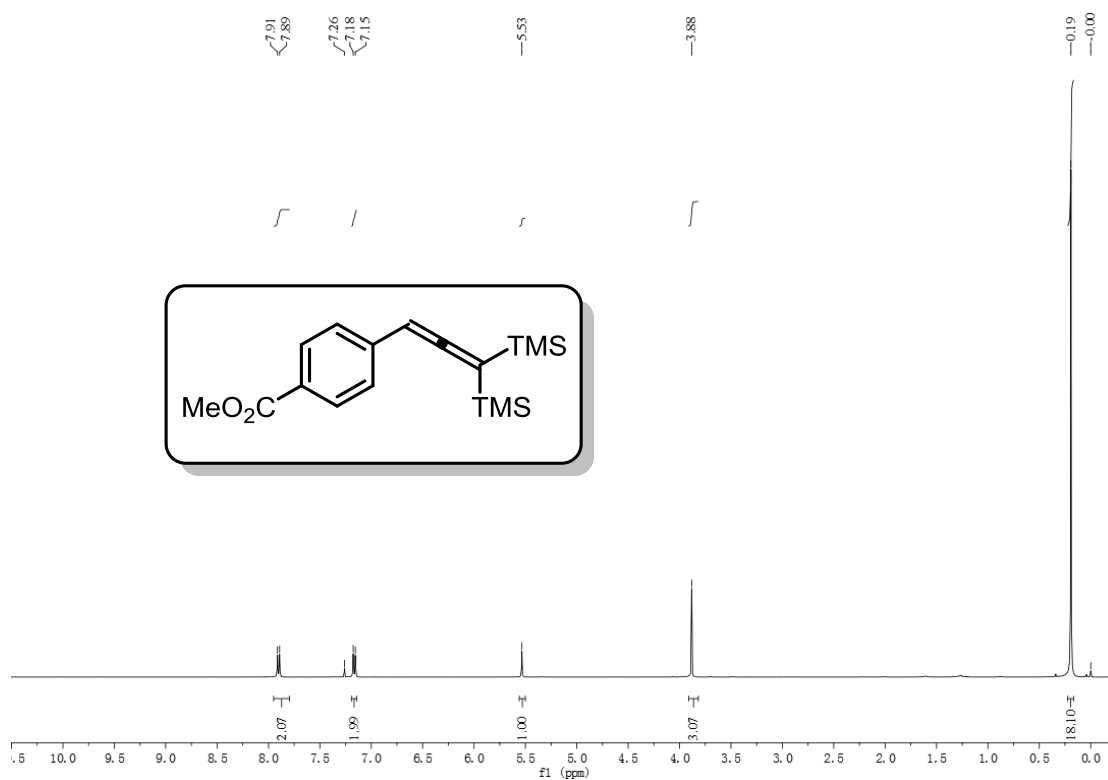
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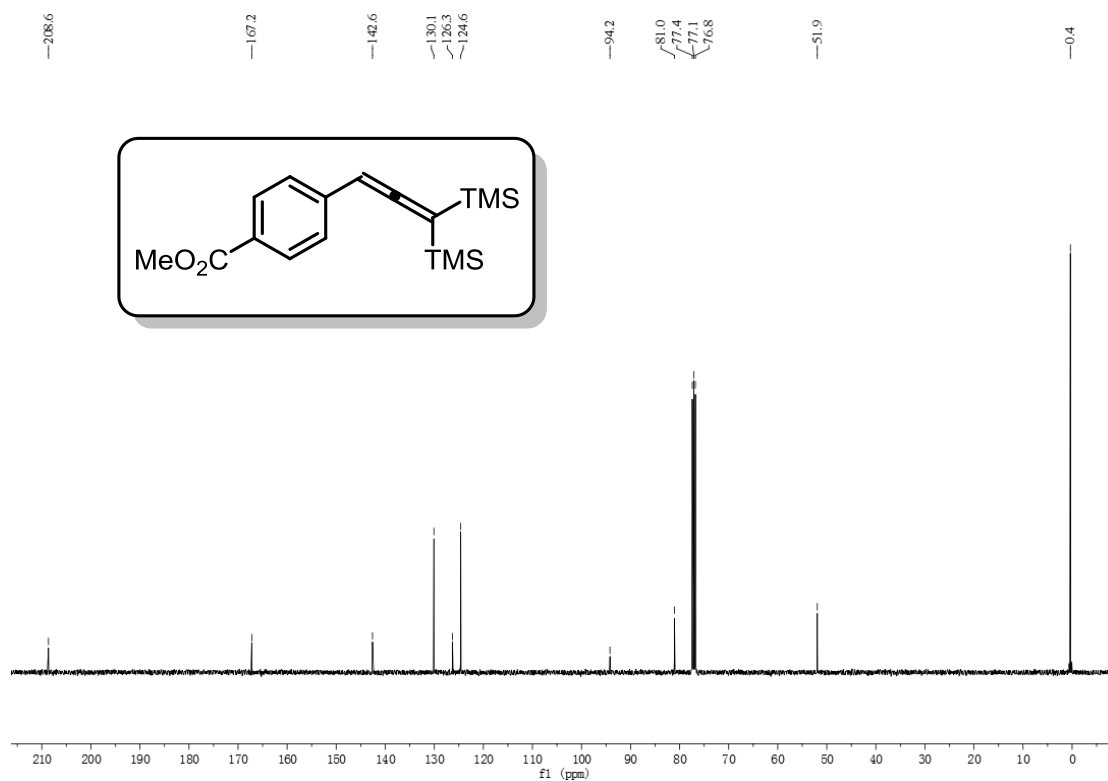
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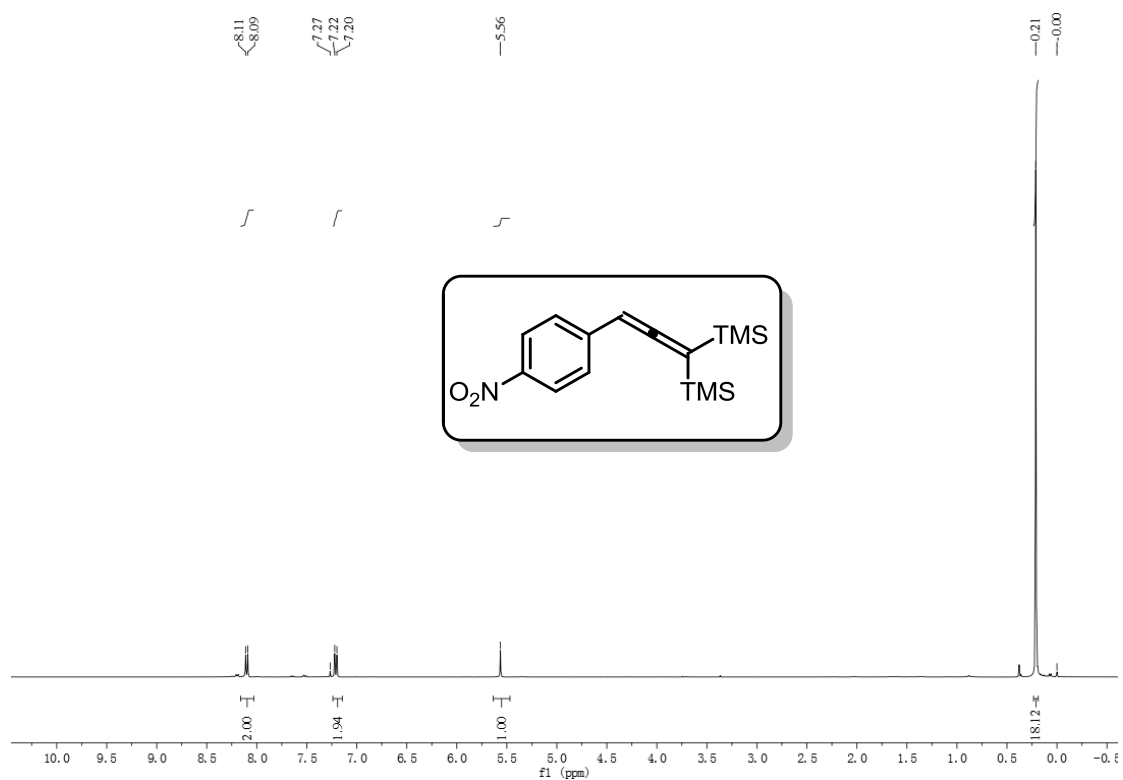
¹H NMR Spectrum of methyl 4-(3,3-bis(trimethylsilyl)propa-1,2-dien-1-yl)benzoate 3i



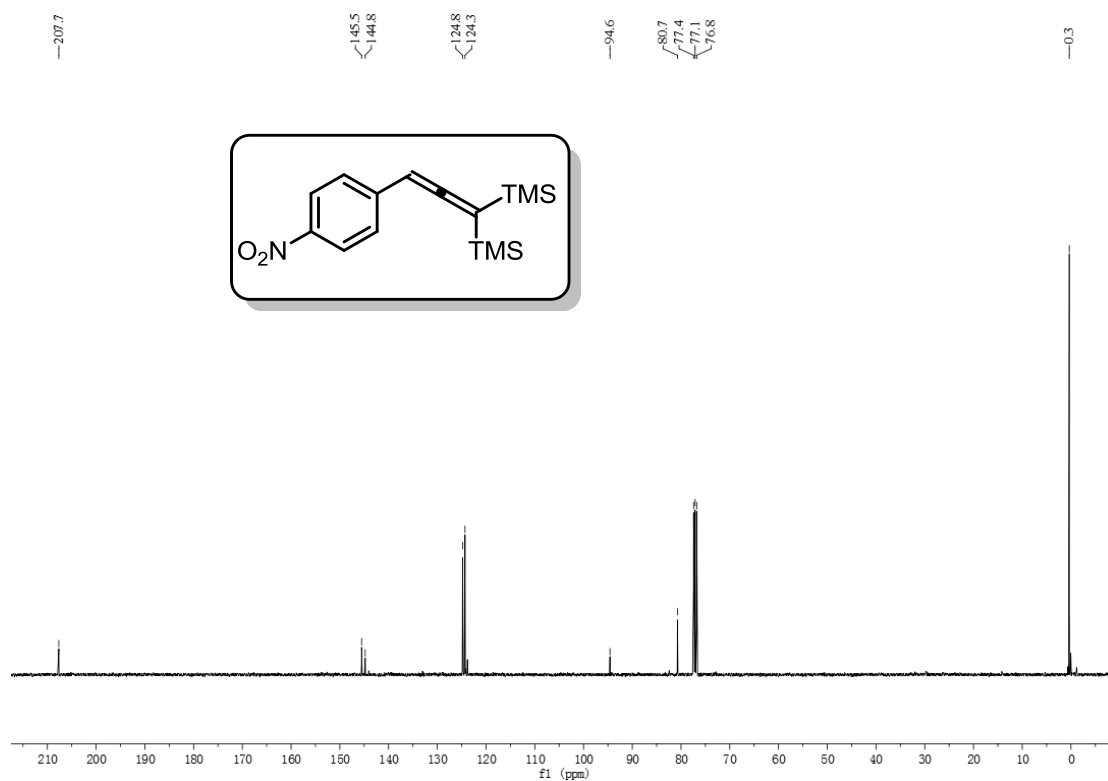
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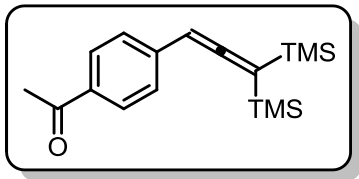
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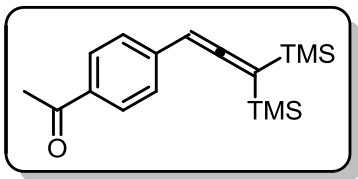
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3k



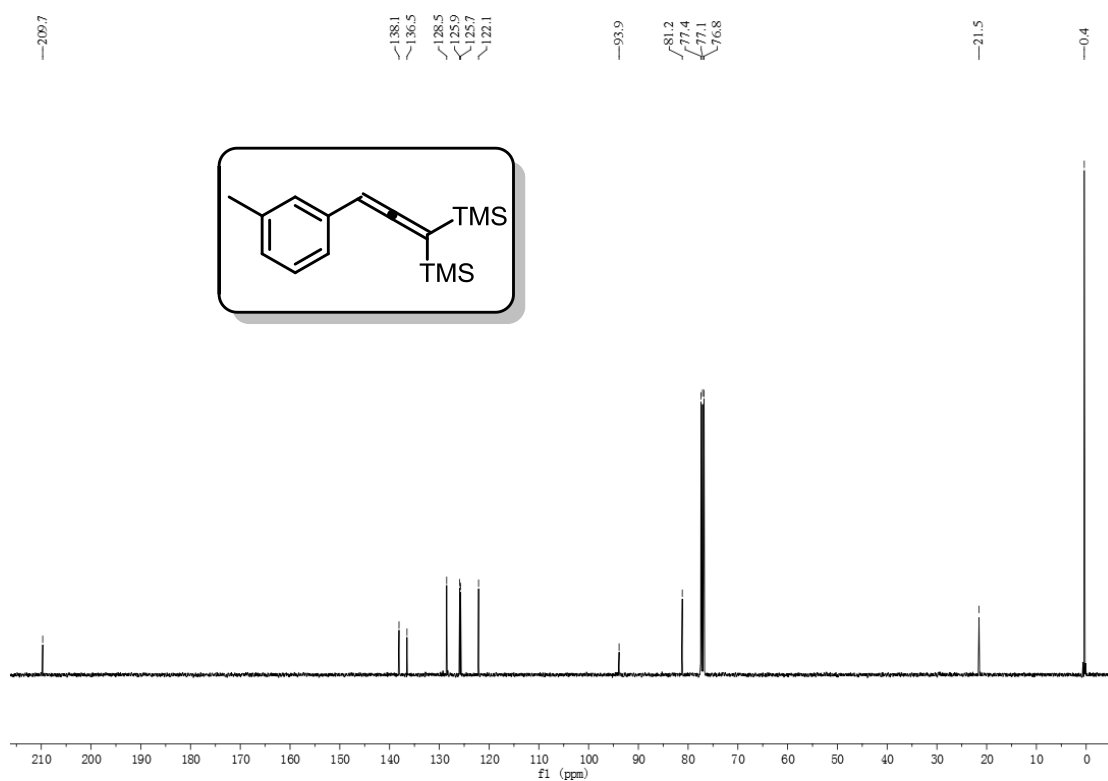
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¹H NMR Spectrum of (3-(*m*-tolyl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane) 3l

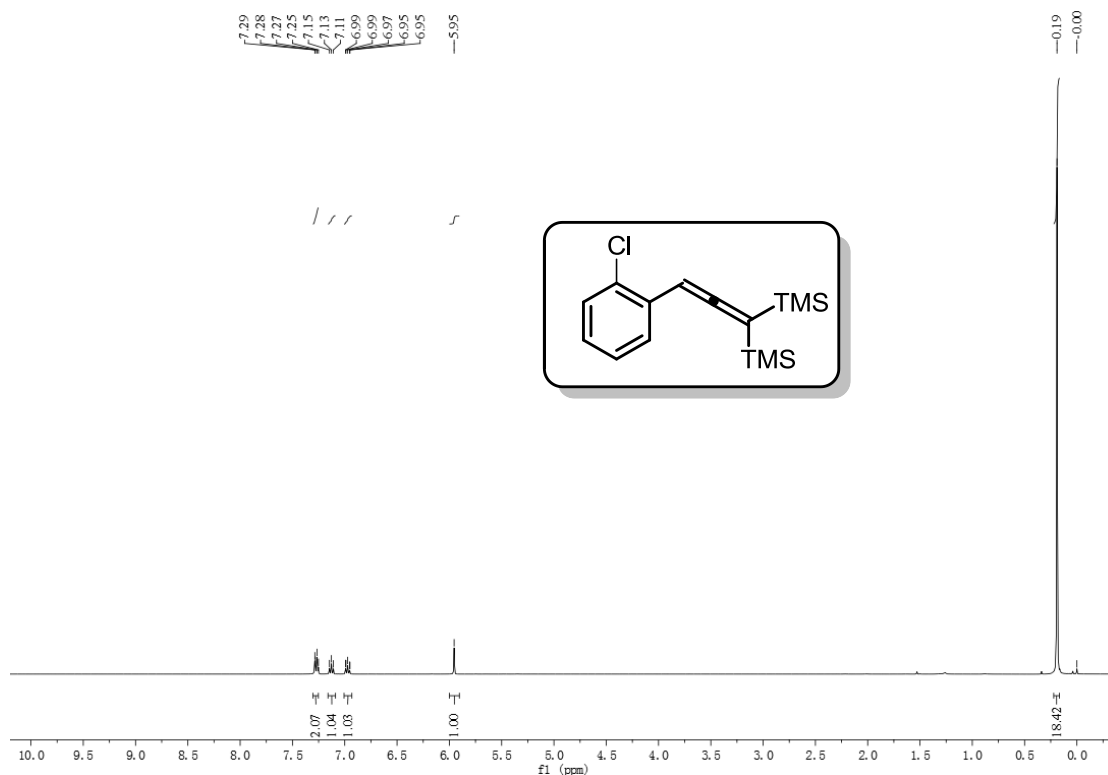


¹³C NMR Spectrum of (3-(*m*-tolyl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane) 3l



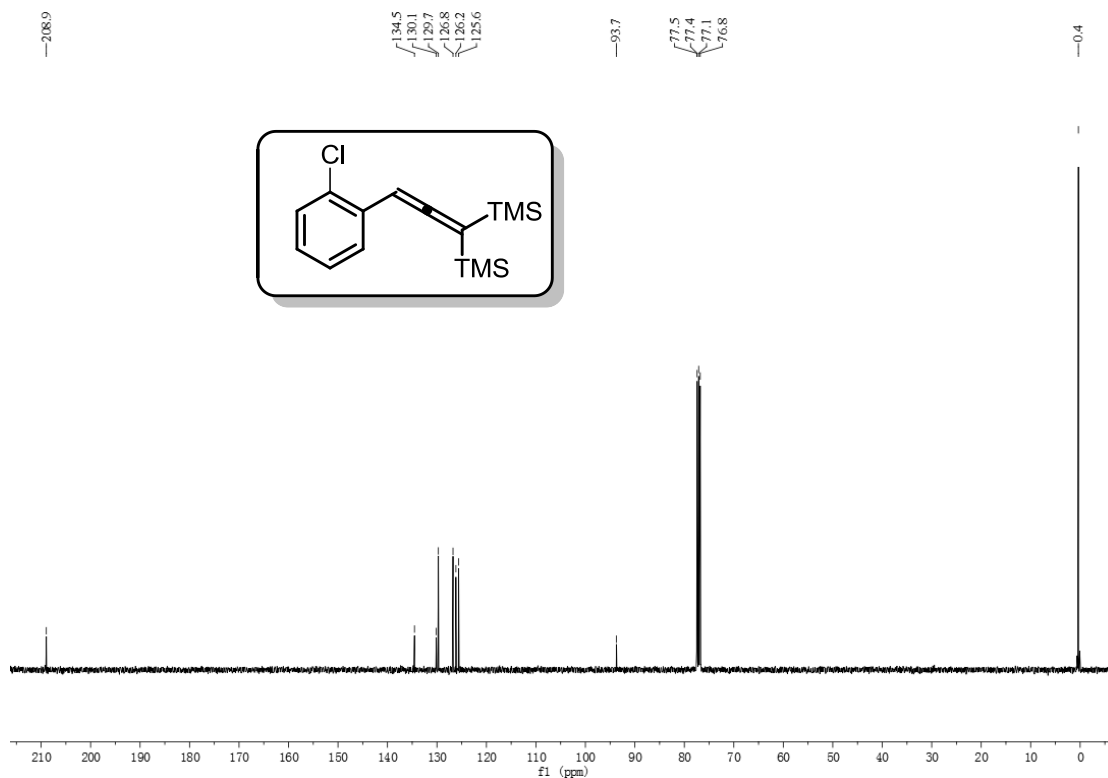
¹H NMR Spectrum of (3-(2-chlorophenyl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane)

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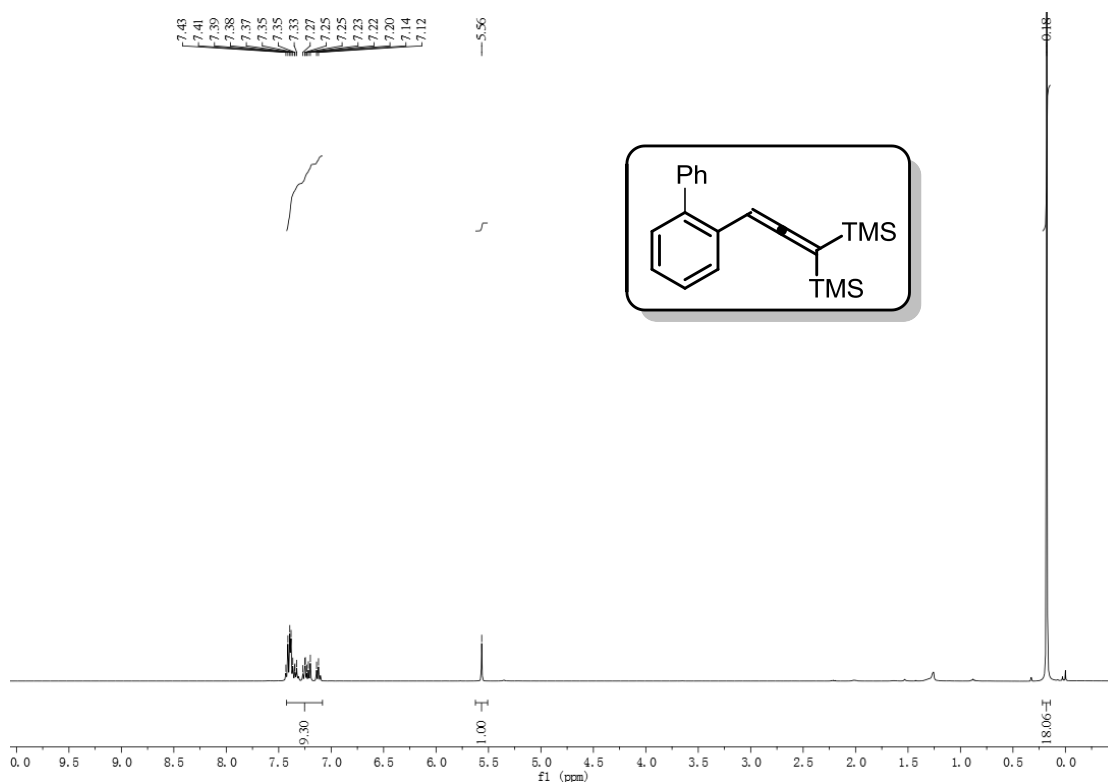


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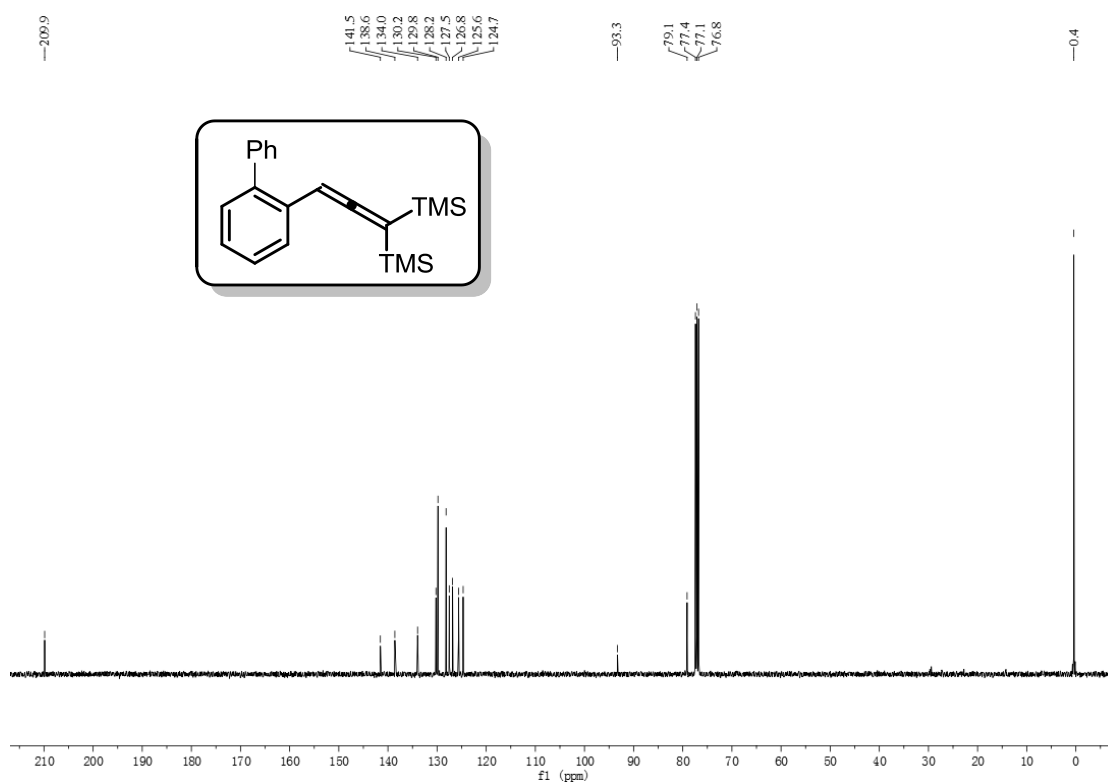
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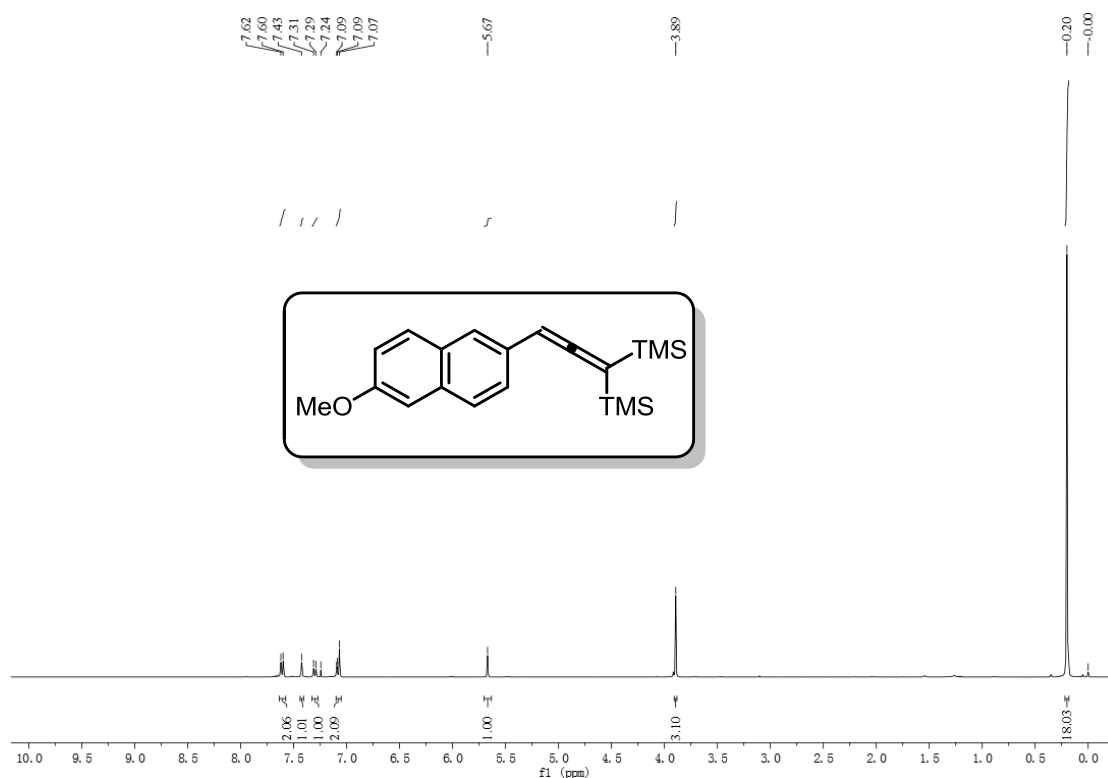
**^1H NMR Spectrum of (3-([1,1'-biphenyl]-2-yl)propa-1,2-diene-1,1-diyl)
bis(trimethylsilane) 3n**



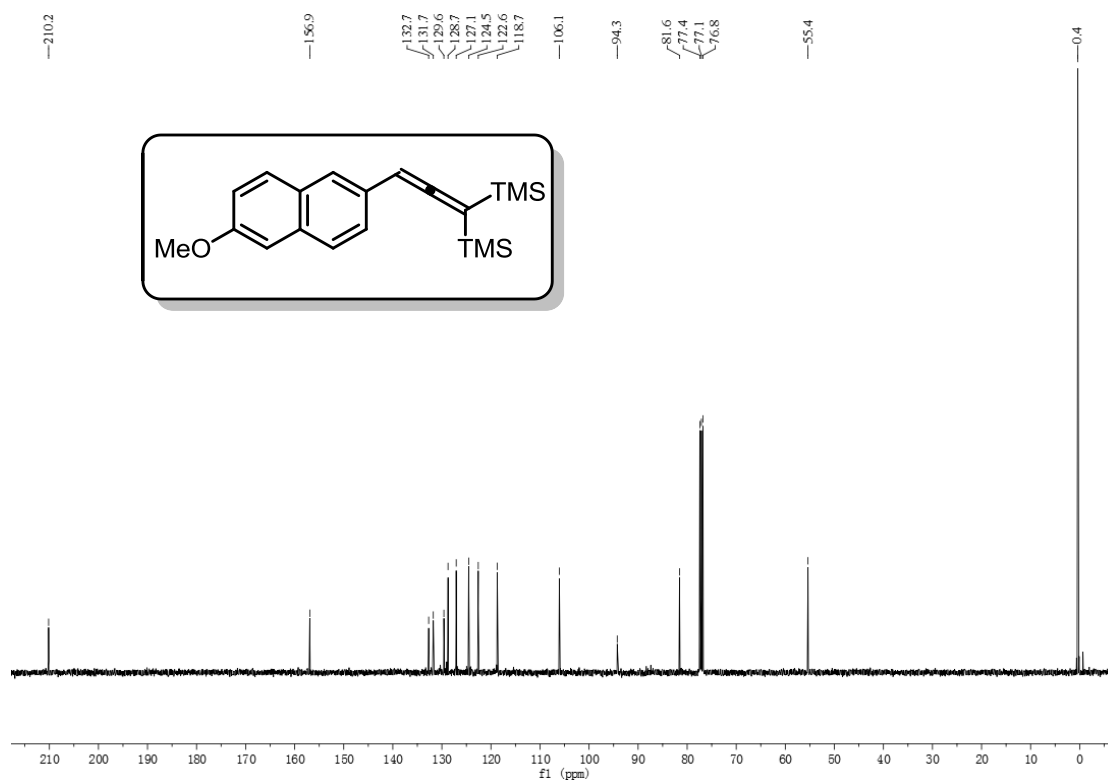
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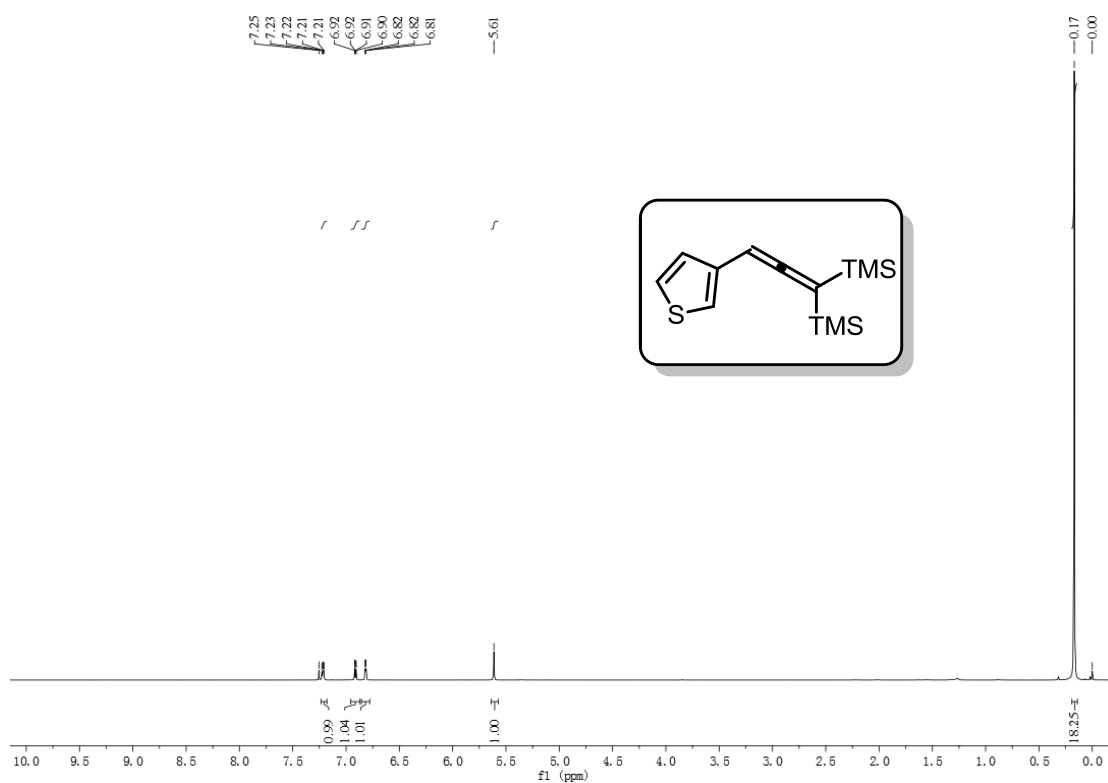
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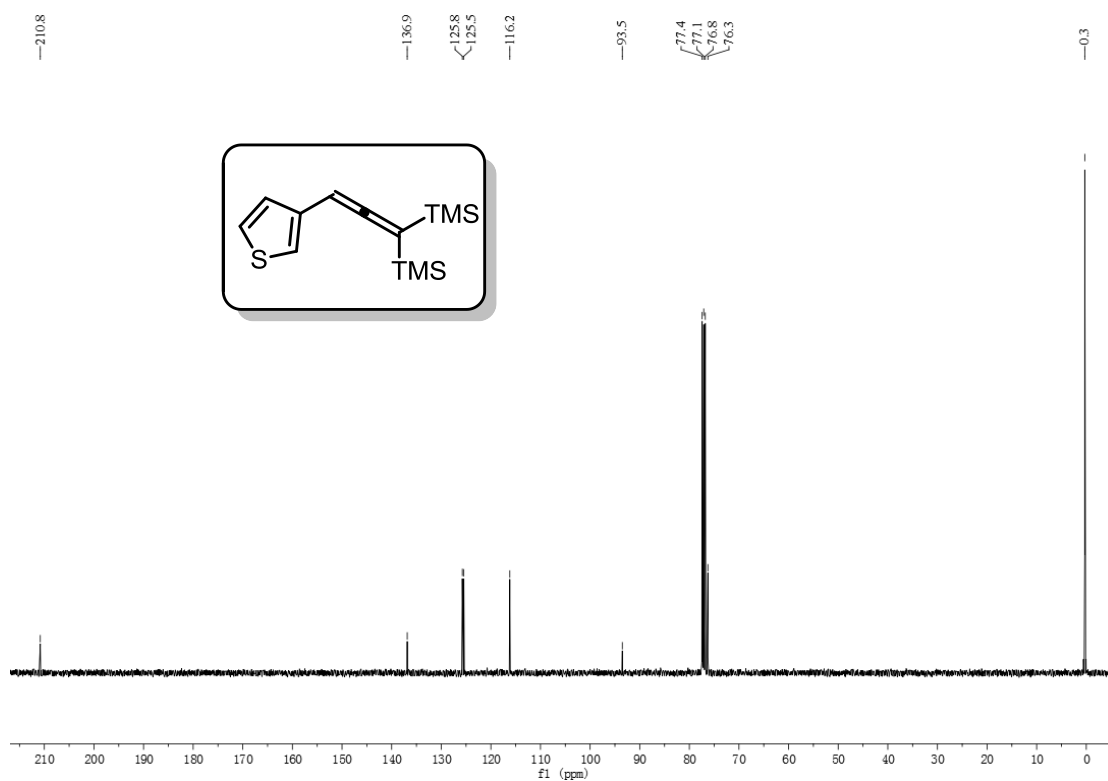
**¹³C NMR Spectrum of (3-(6-methoxynaphthalen-2-yl)propa-1,2-diene-1,1-diyl)
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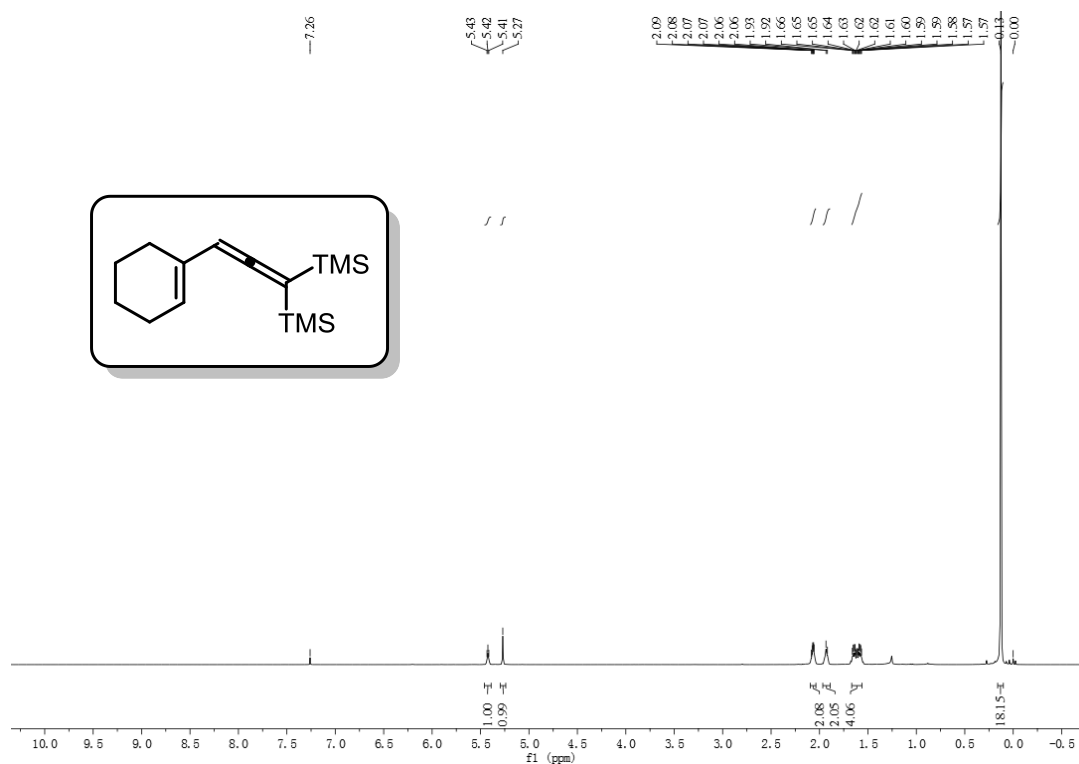
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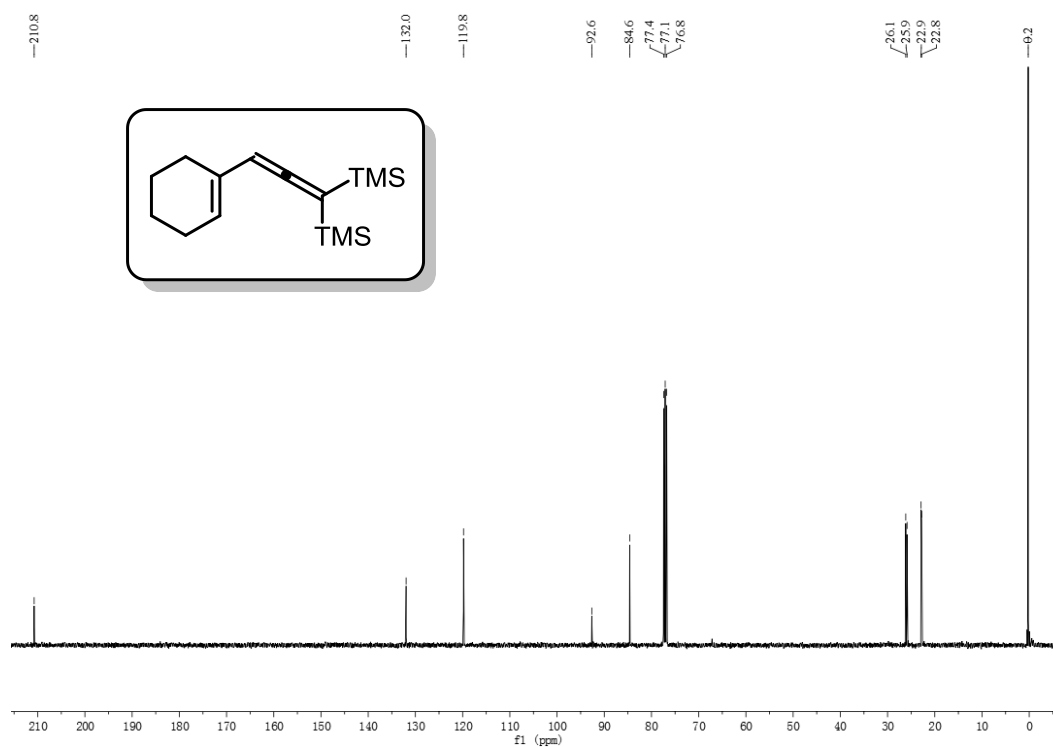
^{13}C NMR Spectrum of (3-(thiophen-3-yl)propa-1,2-diene-1,1-diyl)bis(trimethylsilane) 3p



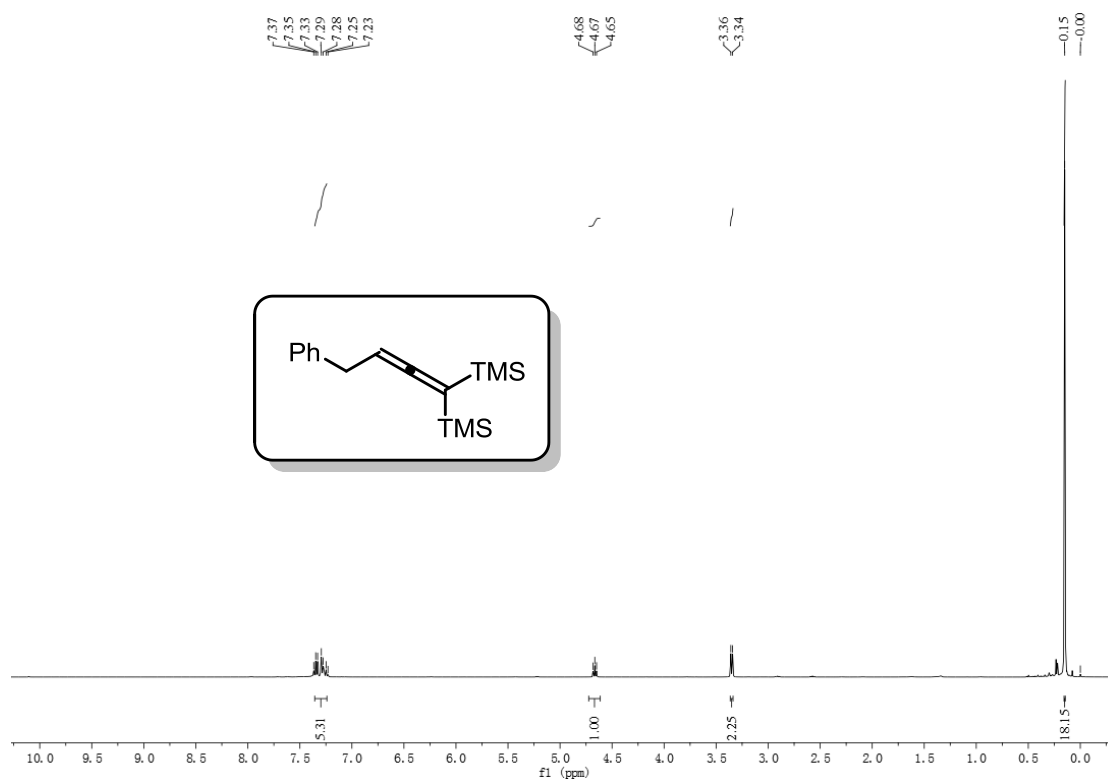
**¹H NMR Spectrum of (3-(cyclohex-1-en-1-yl)propa-1,2-diene-1,1-diyl)
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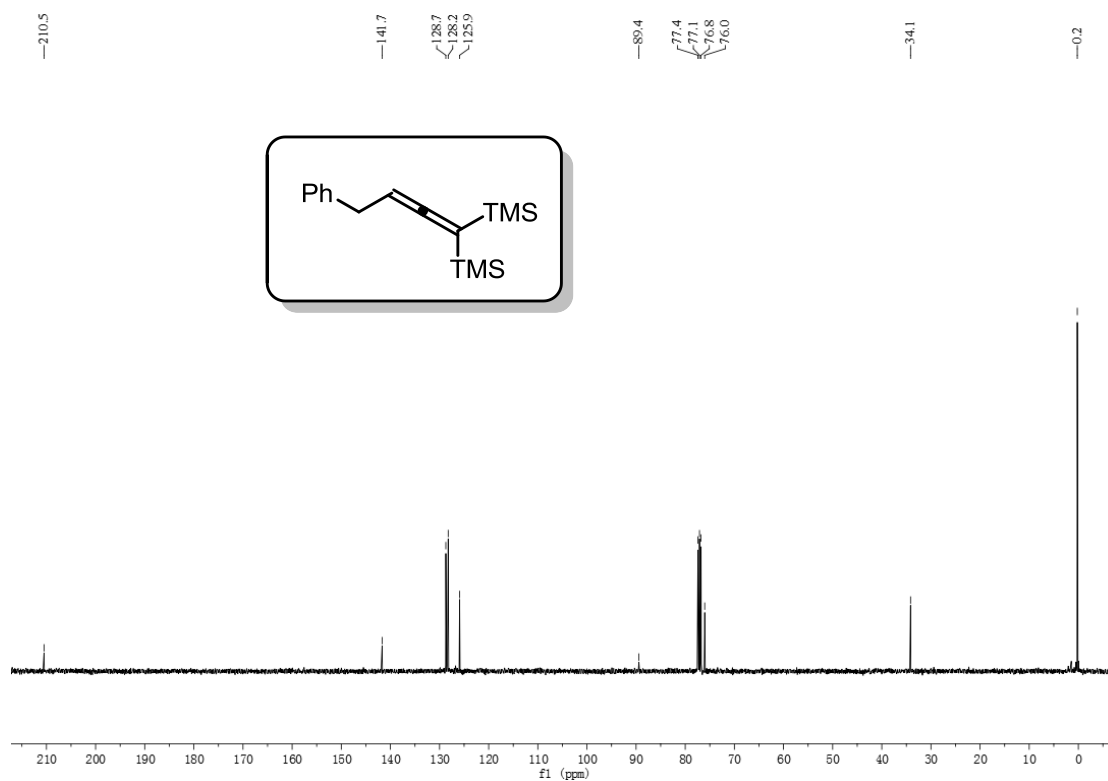
**¹³C NMR Spectrum of (3-(cyclohex-1-en-1-yl)propa-1,2-diene-1,1-diyl)
bis(trimethylsilane) 3q**



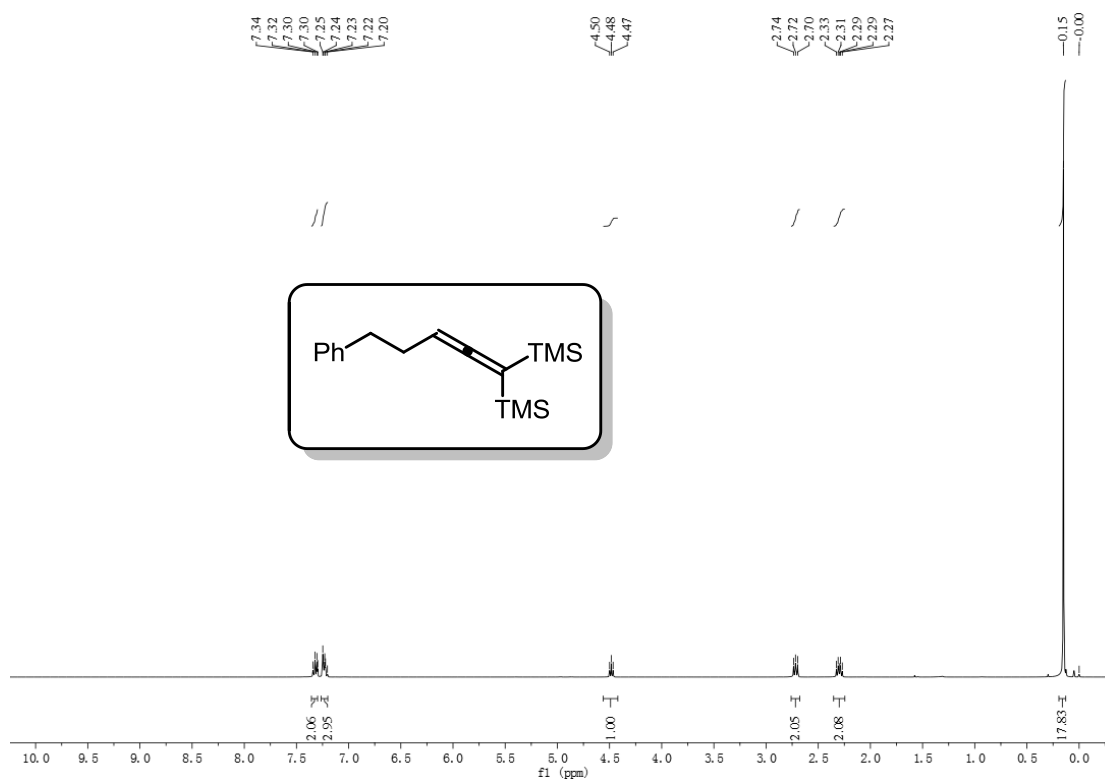
^1H NMR Spectrum of (4-phenylbuta-1,2-diene-1,1-diyl)bis(trimethylsilane) 3r



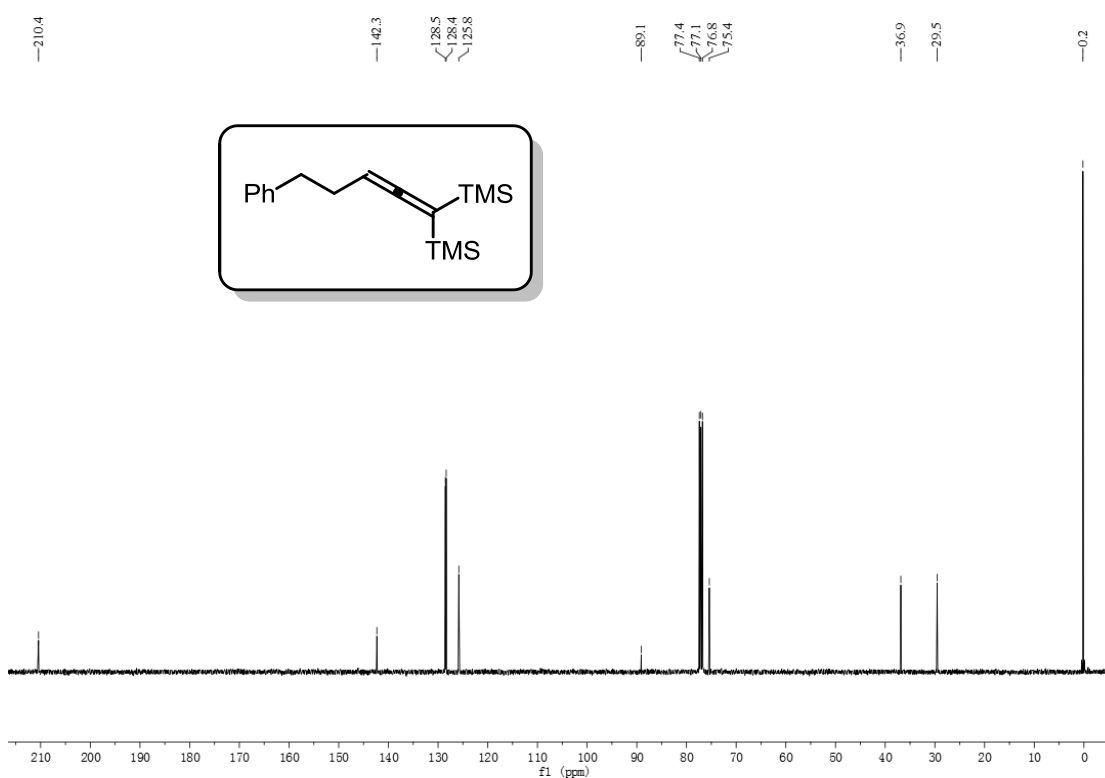
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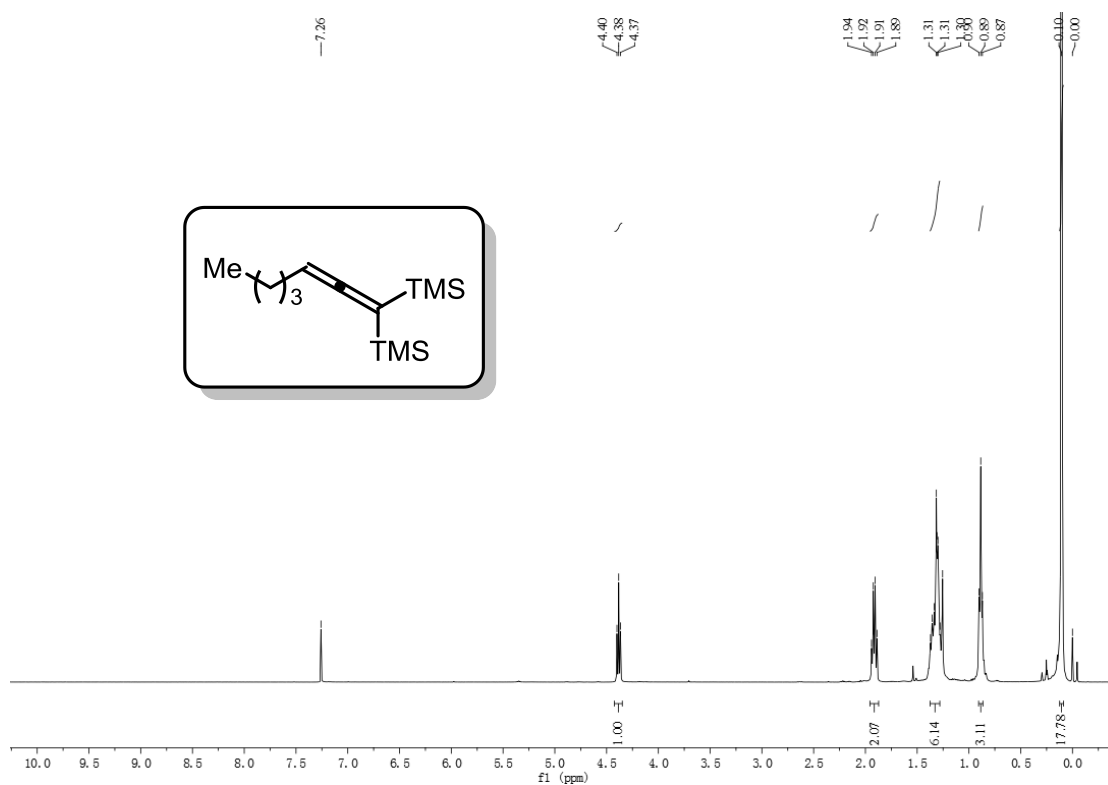
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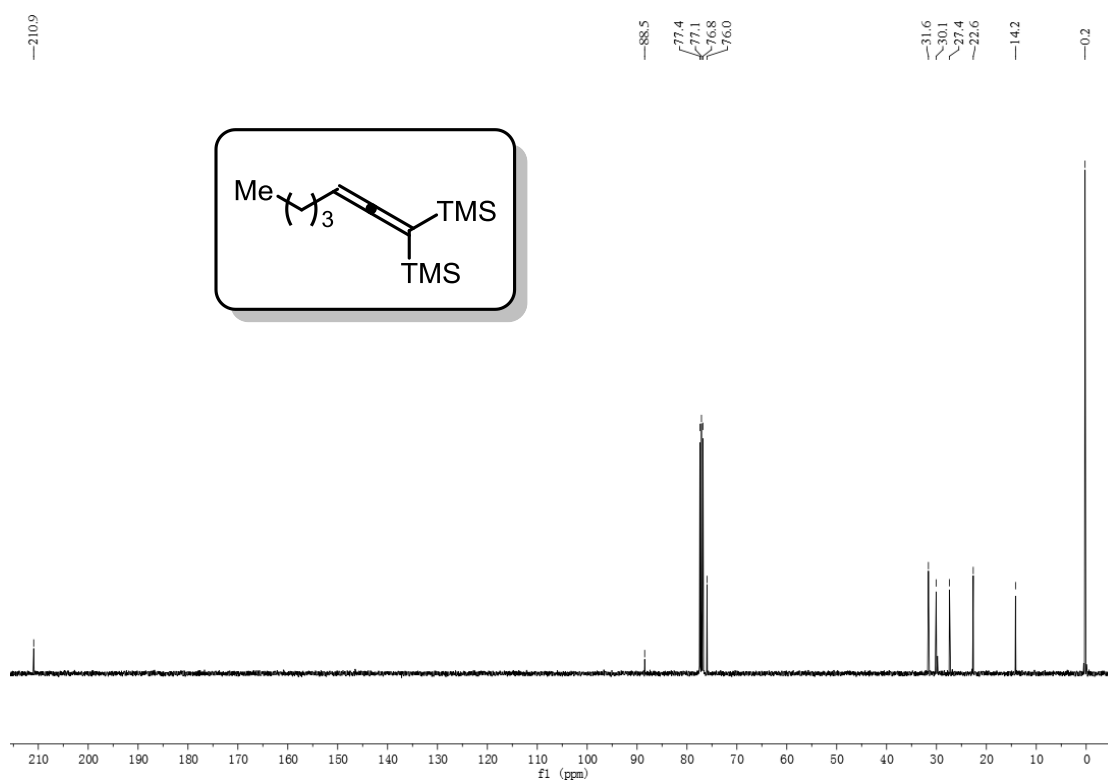
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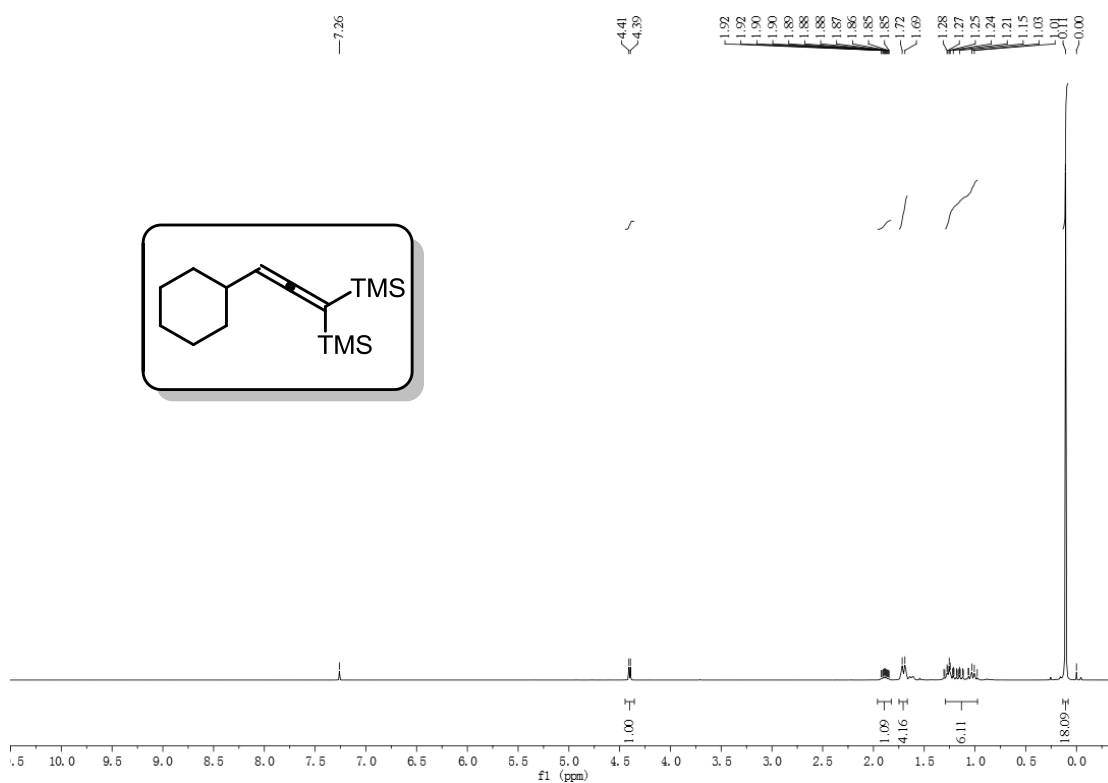
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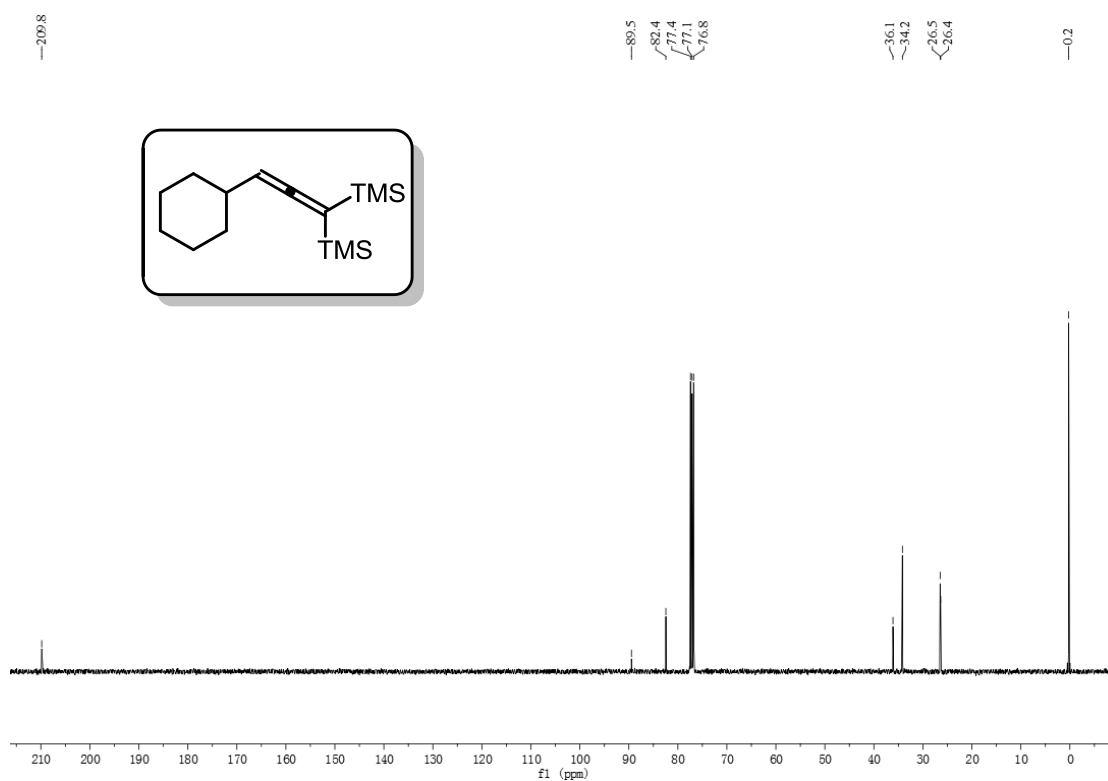
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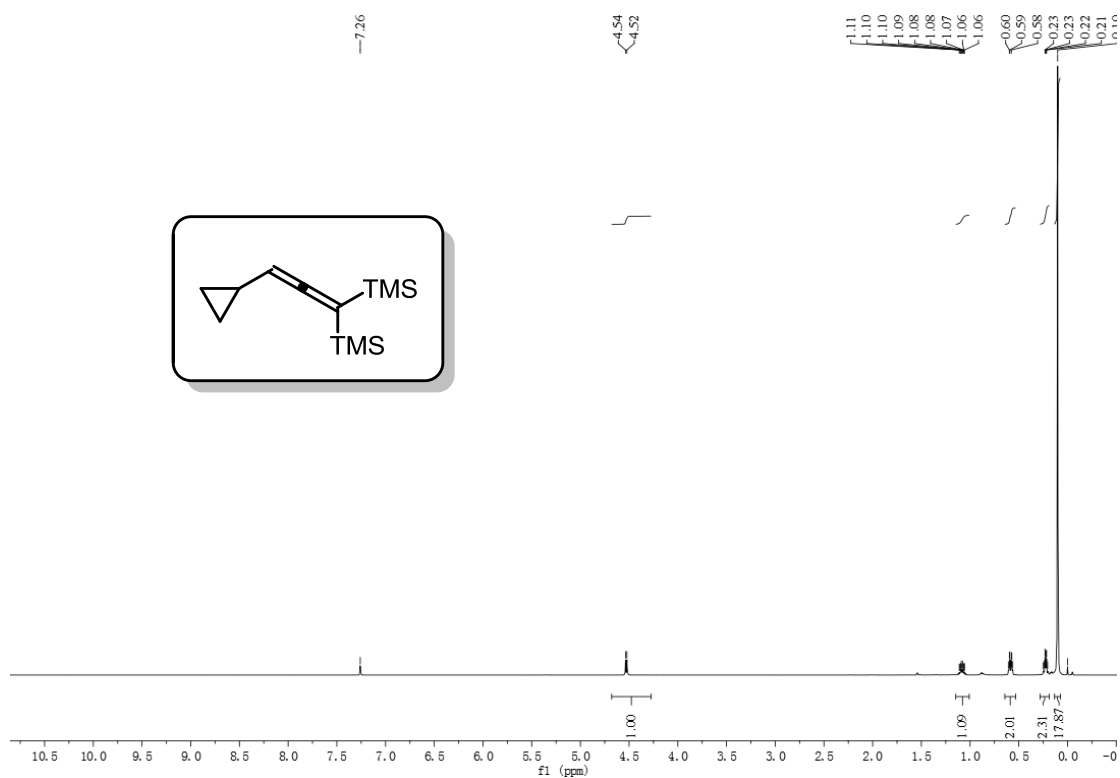
^1H NMR Spectrum of (3-cyclohexylpropa-1,2-diene-1,1-diyl)bis(trimethylsilane) 3u



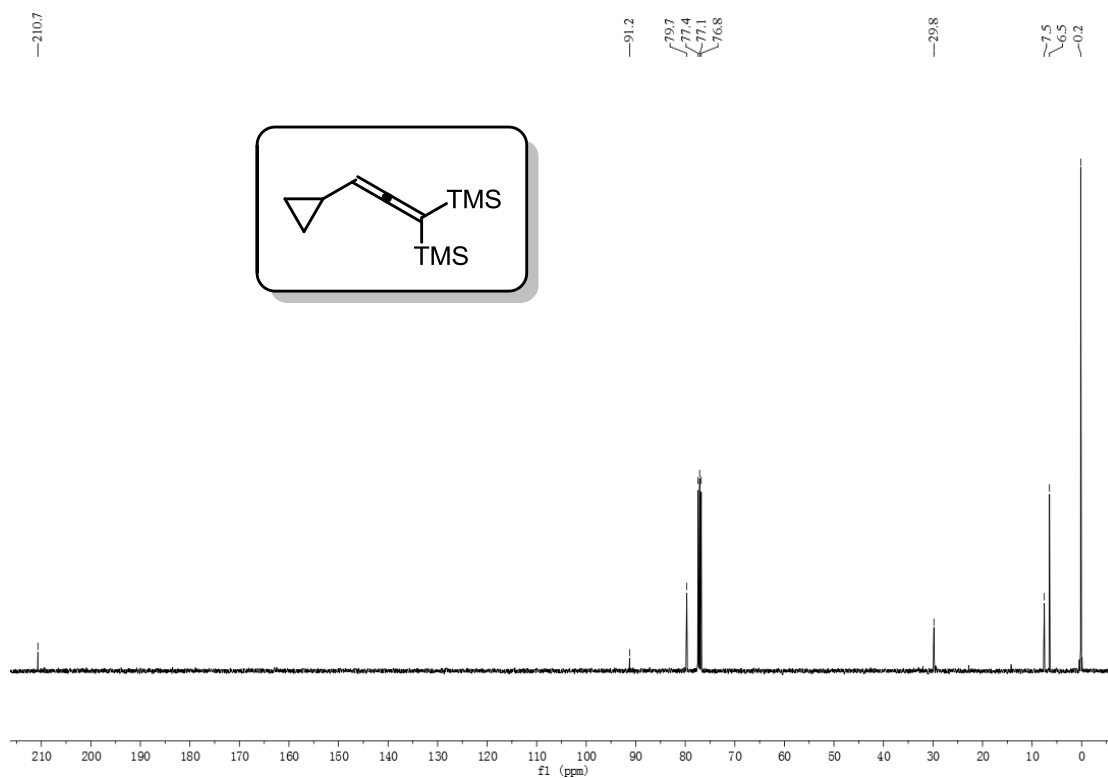
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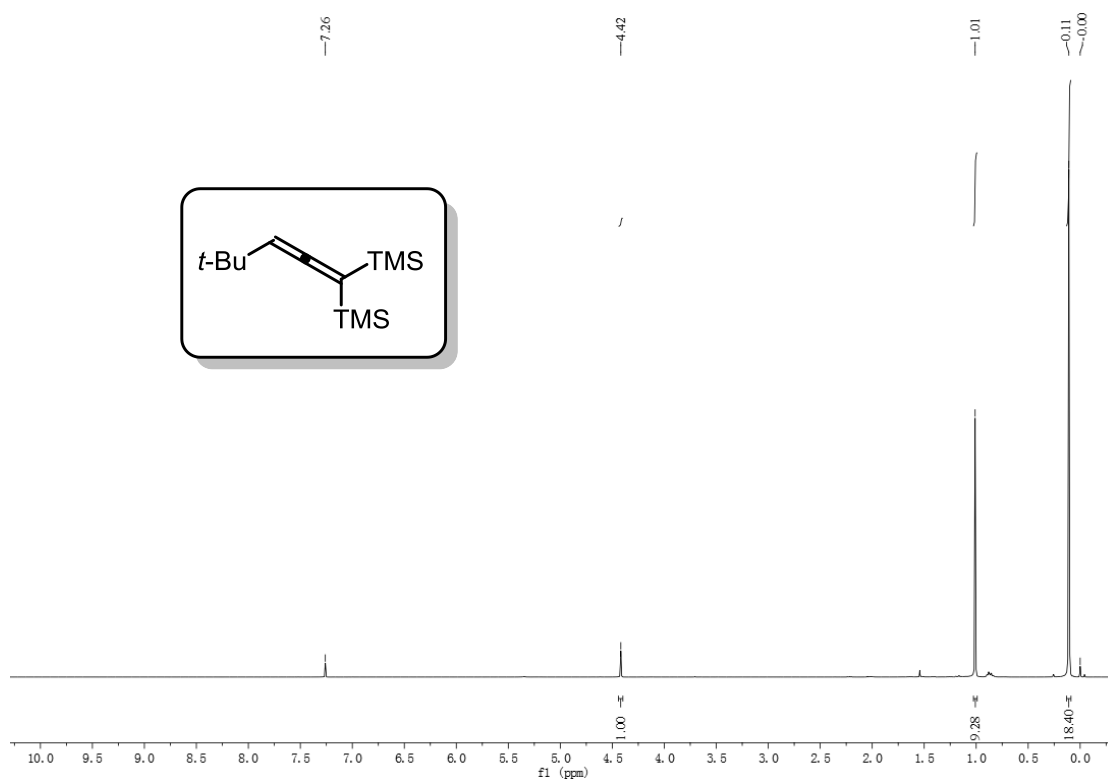
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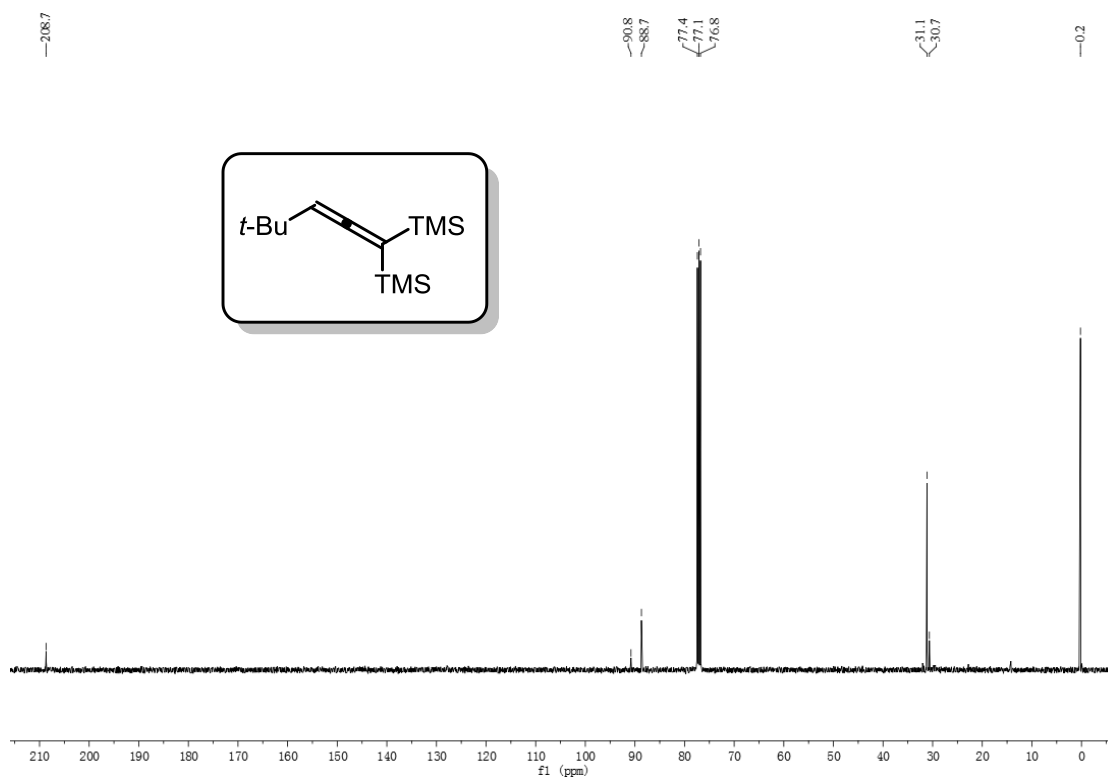
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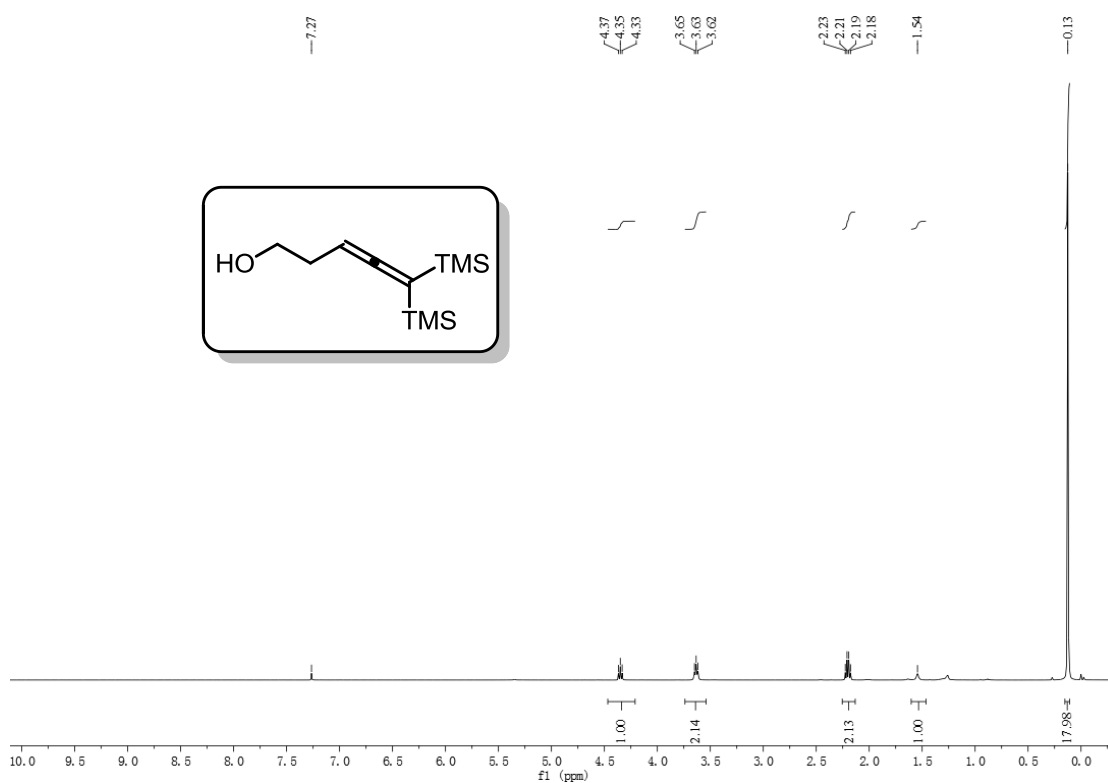
^1H NMR Spectrum of (4,4-dimethylpenta-1,2-diene-1,1-diyl)bis(trimethylsilane) 3w



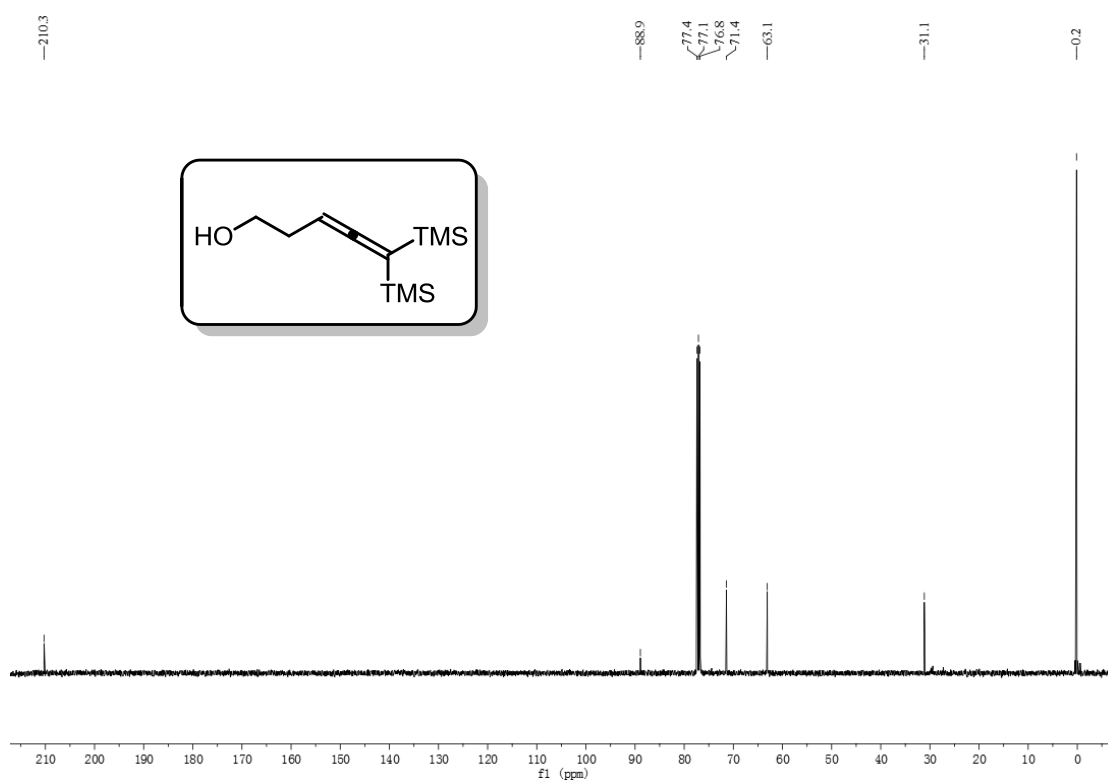
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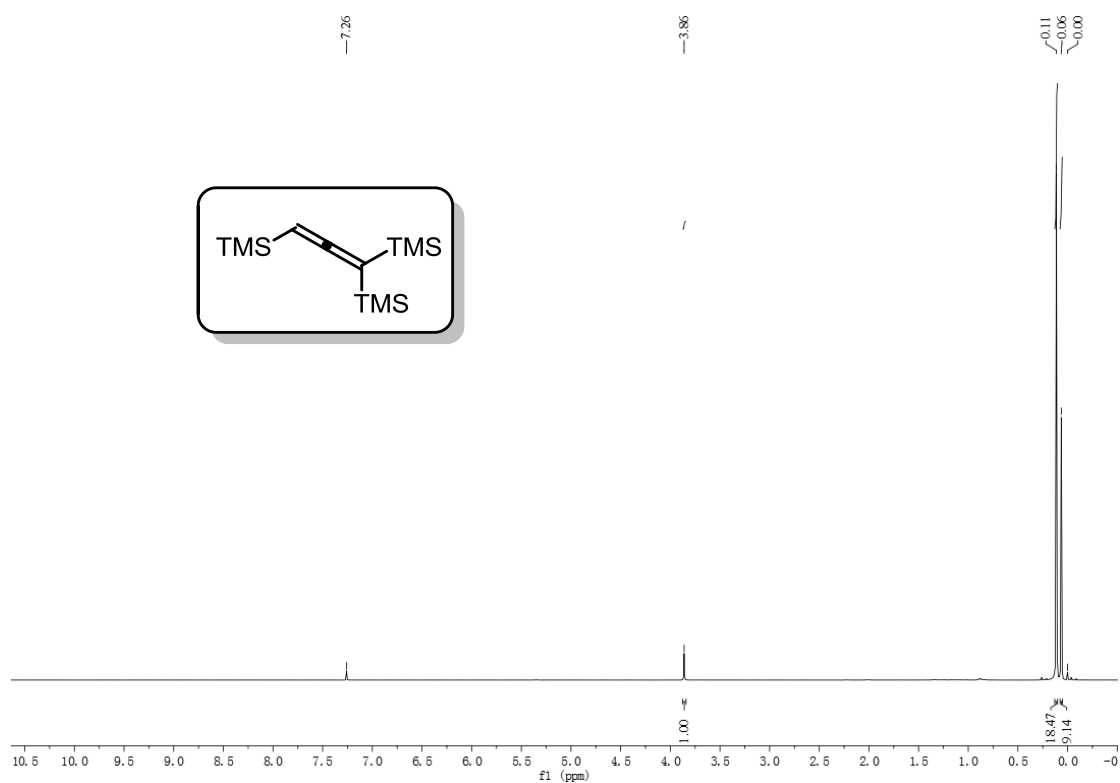
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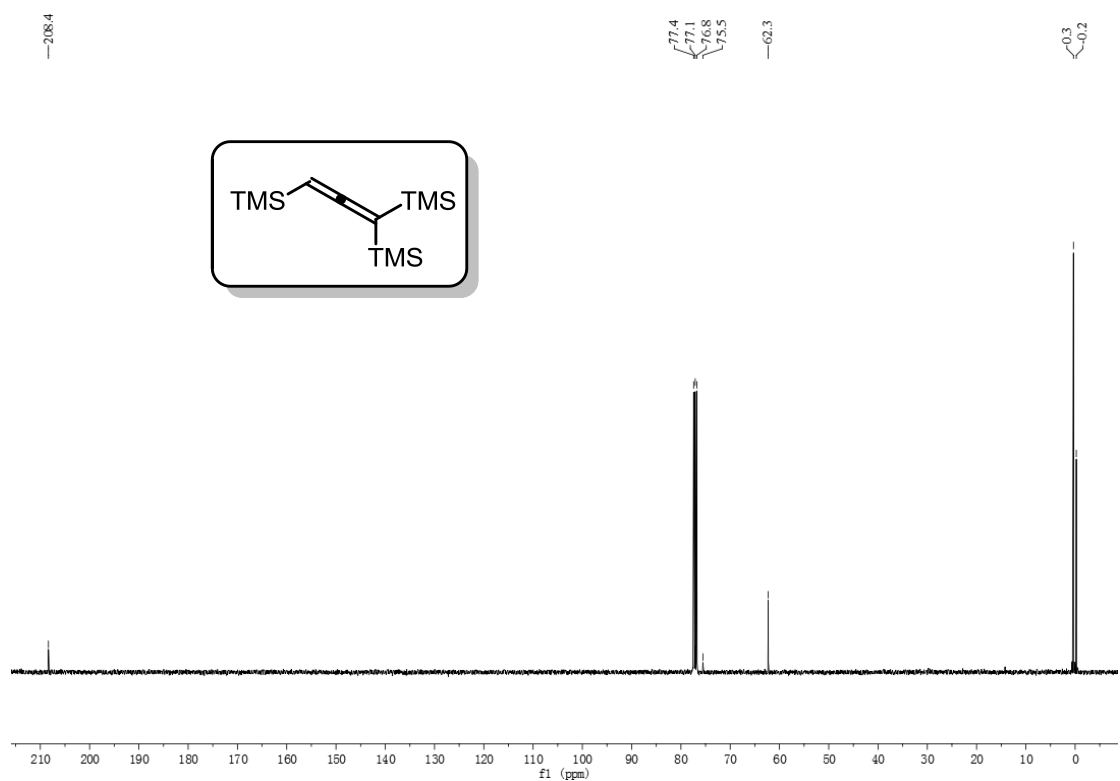
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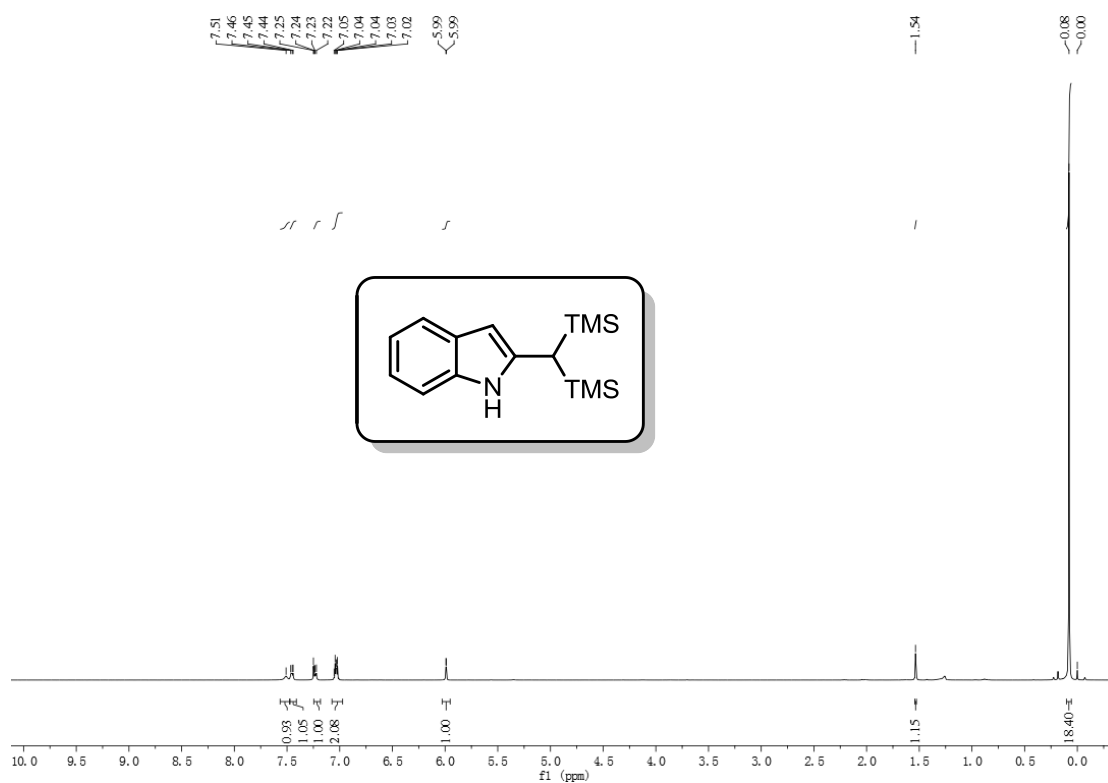
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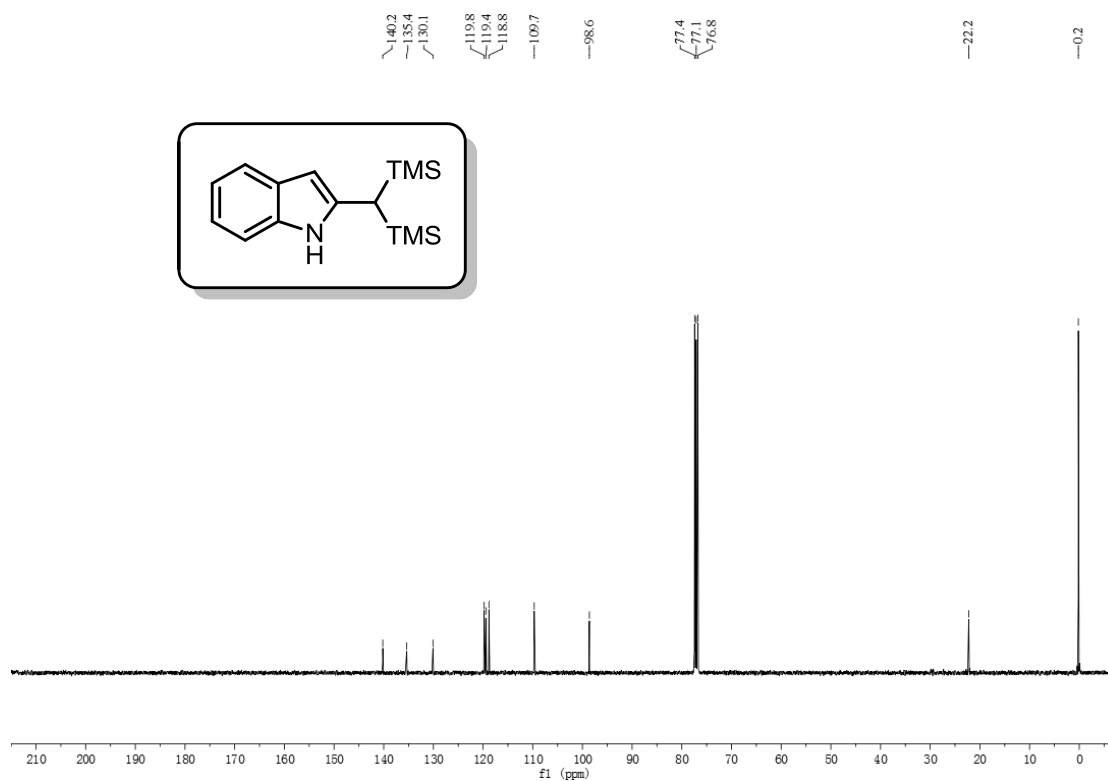
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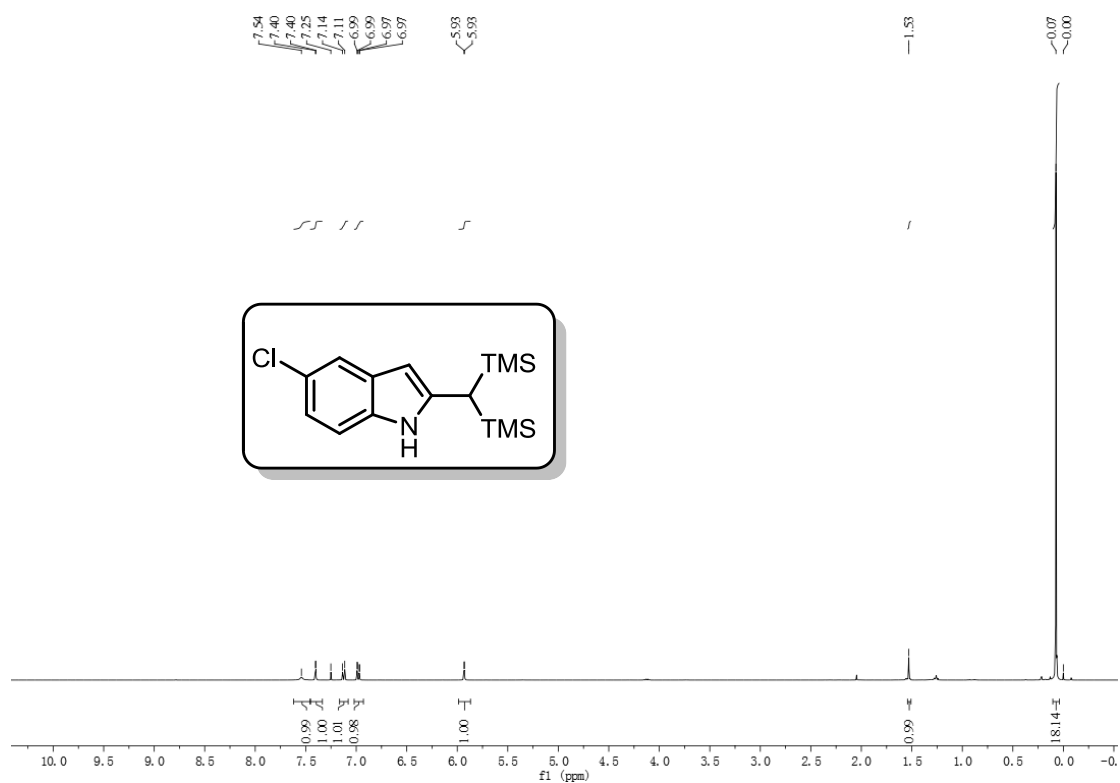
¹H NMR Spectrum of 2-(bis(trimethylsilyl)methyl)-1*H*-indole 5a



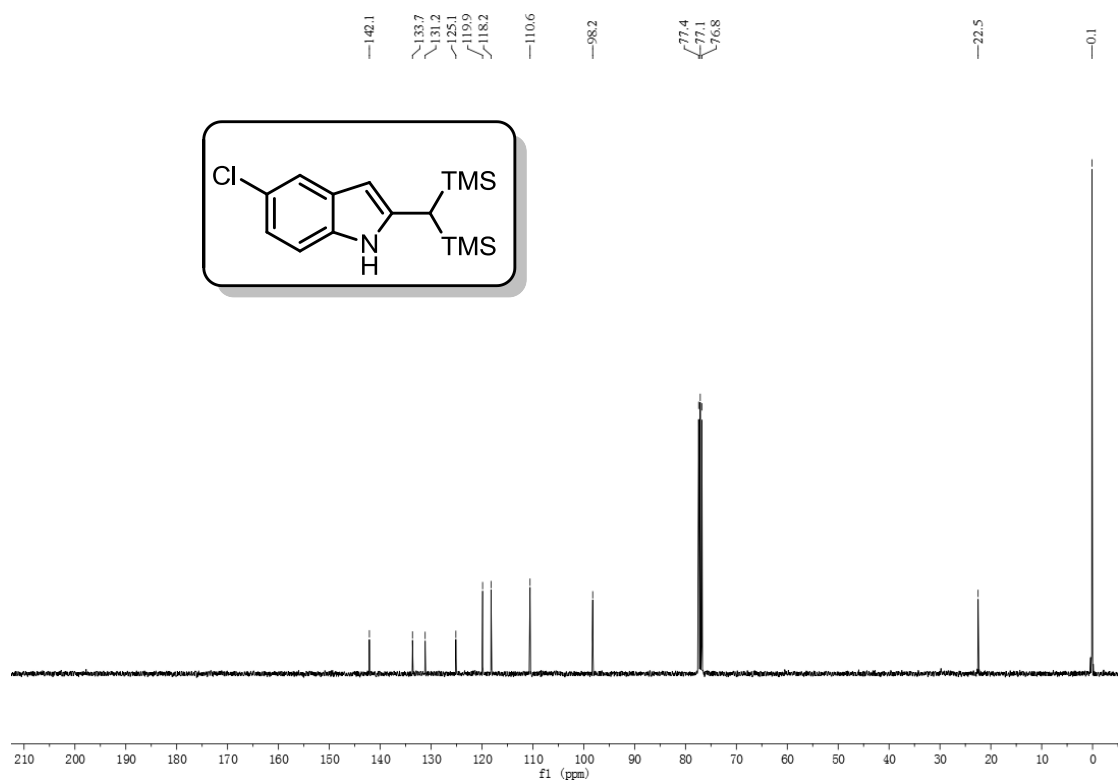
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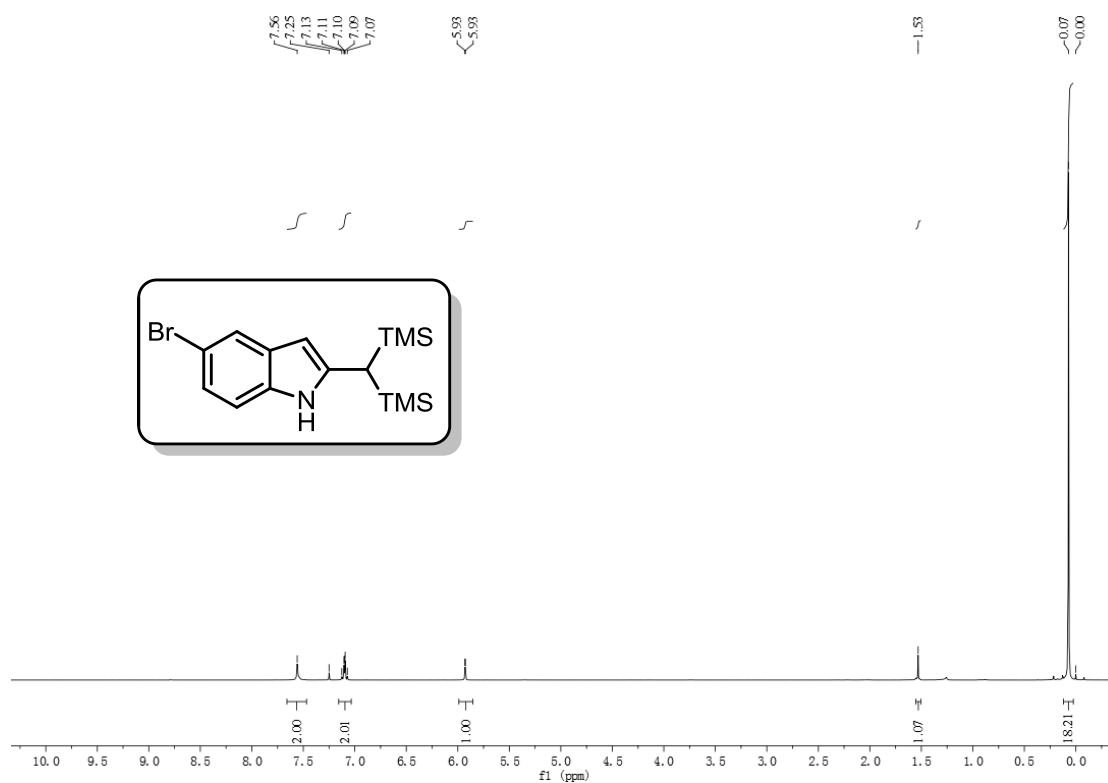
¹H NMR Spectrum of 2-(bis(trimethylsilyl)methyl)-5-chloro-1H-indole 5b



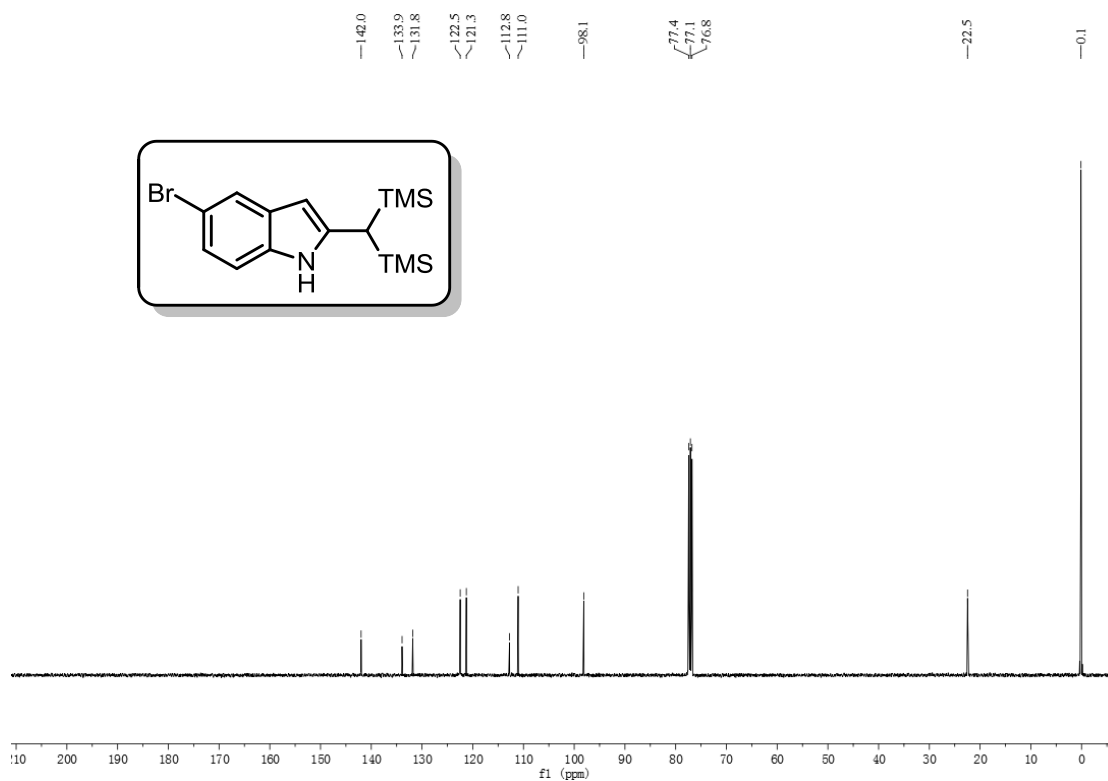
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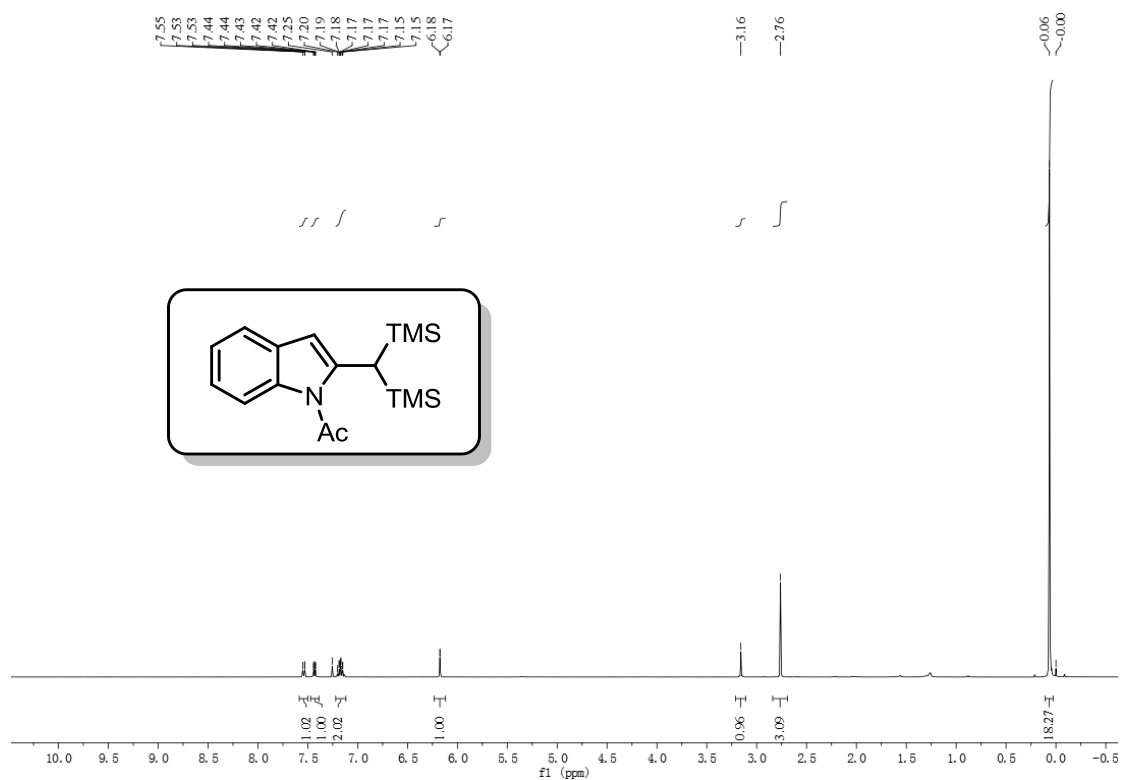
¹H NMR Spectrum of 2-(bis(trimethylsilyl)methyl)-5-bromo-1H-indole 5c



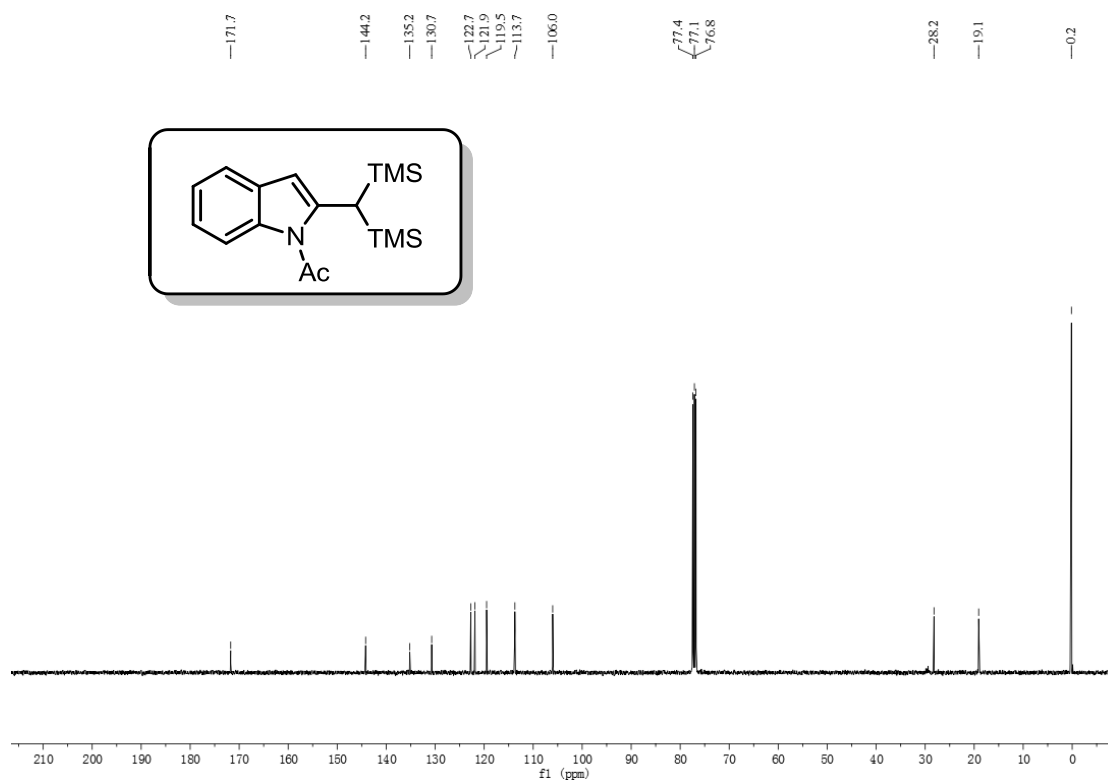
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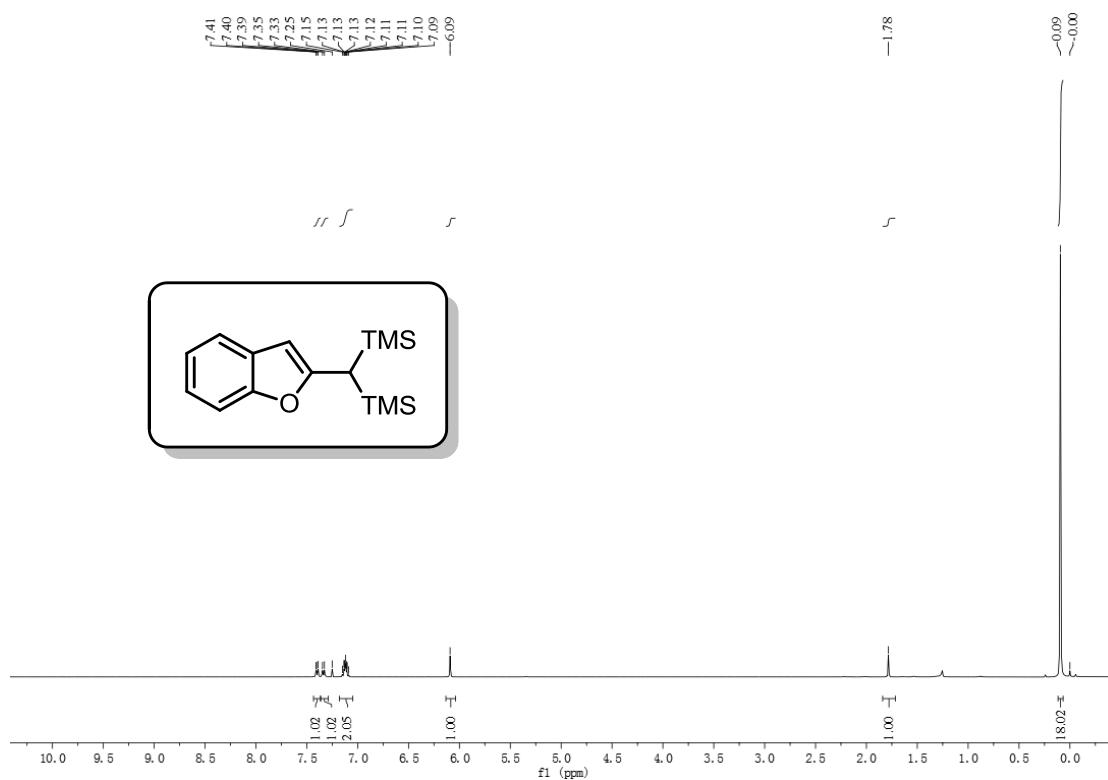
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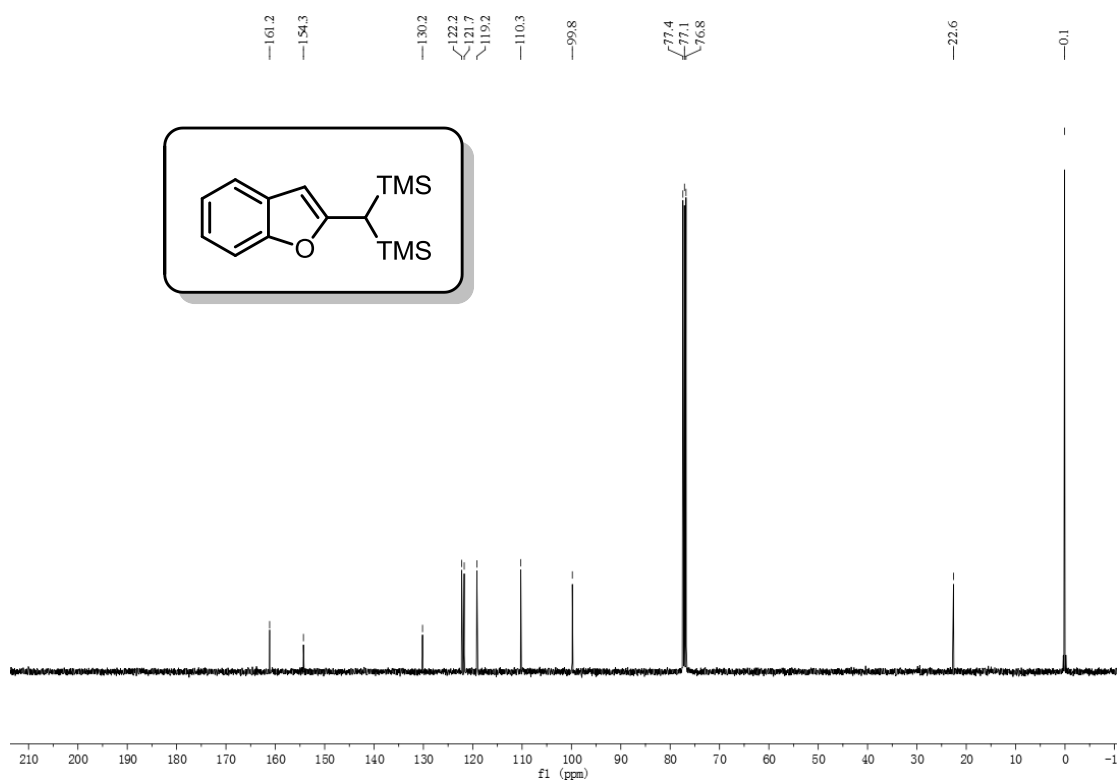
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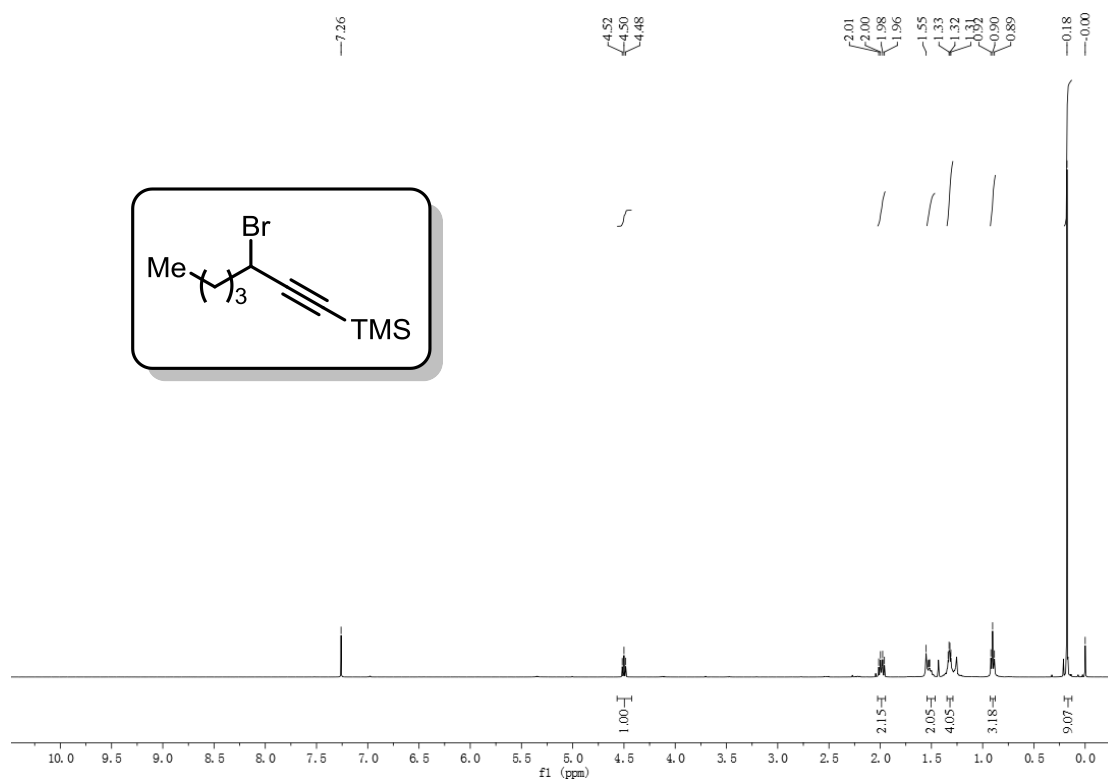
¹H NMR Spectrum of (benzofuran-2-ylmethylene)bis(trimethylsilane) 5e



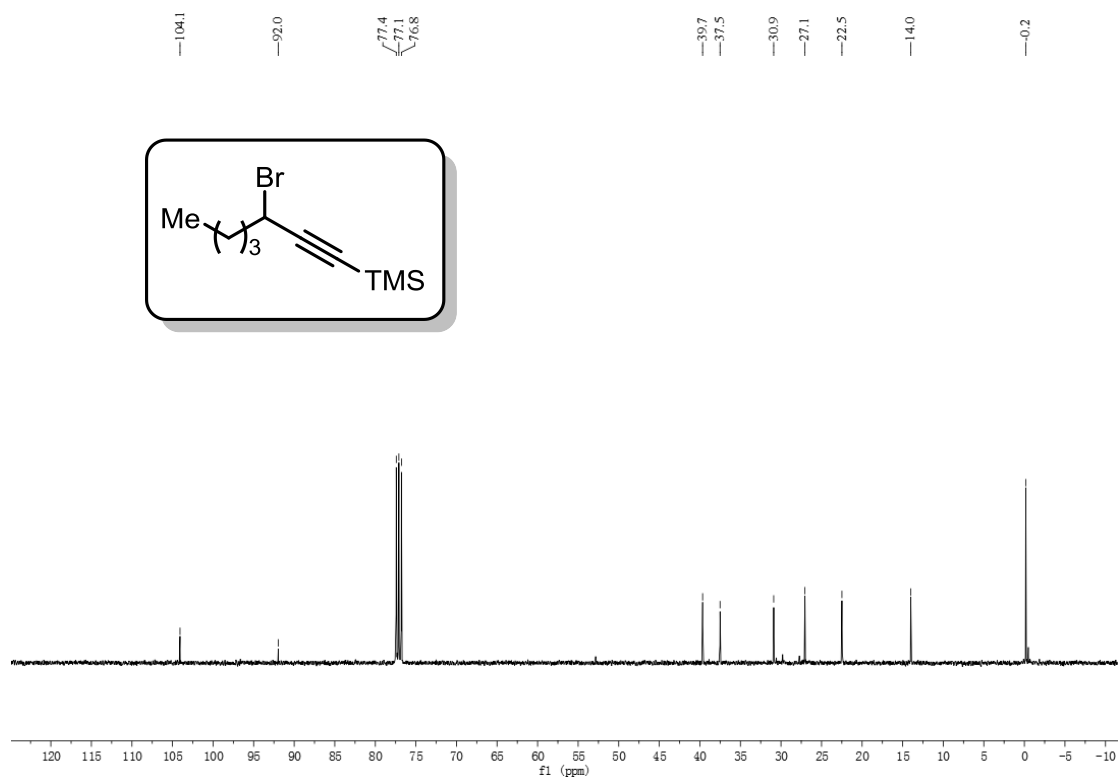
¹³C NMR Spectrum of (benzofuran-2-ylmethylene)bis(trimethylsilane) 5e



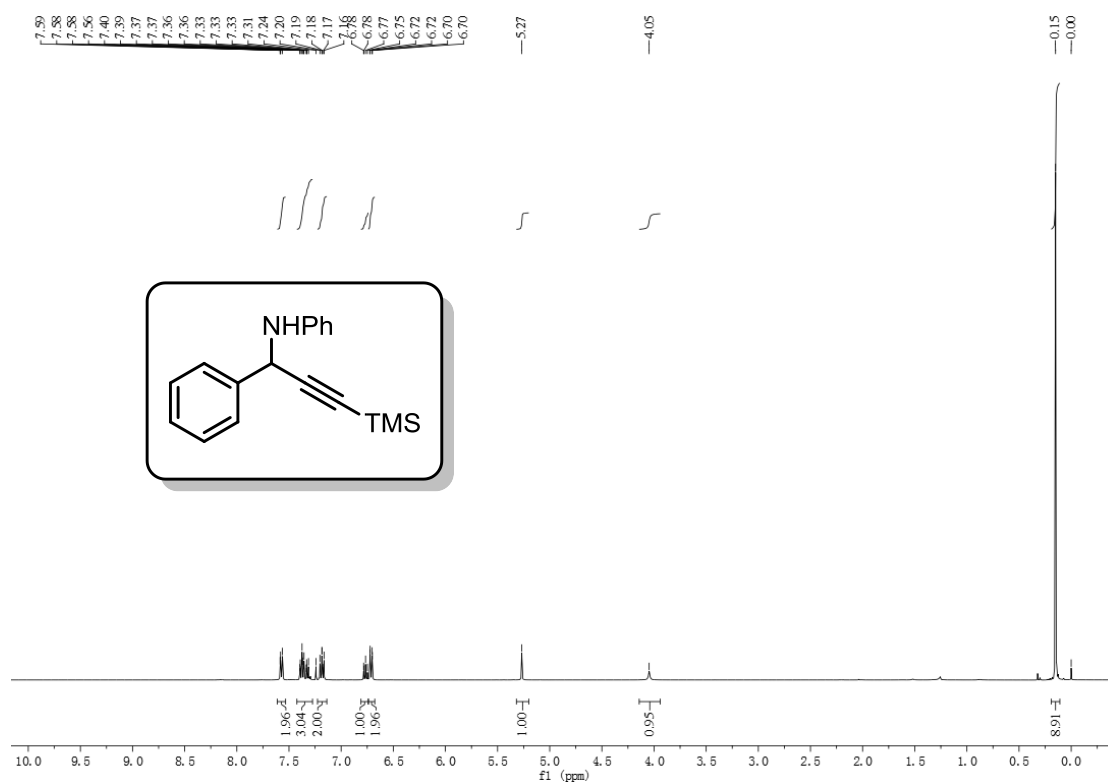
¹H NMR Spectrum of (3-bromooct-1-yn-1-yl)trimethylsilane 6a



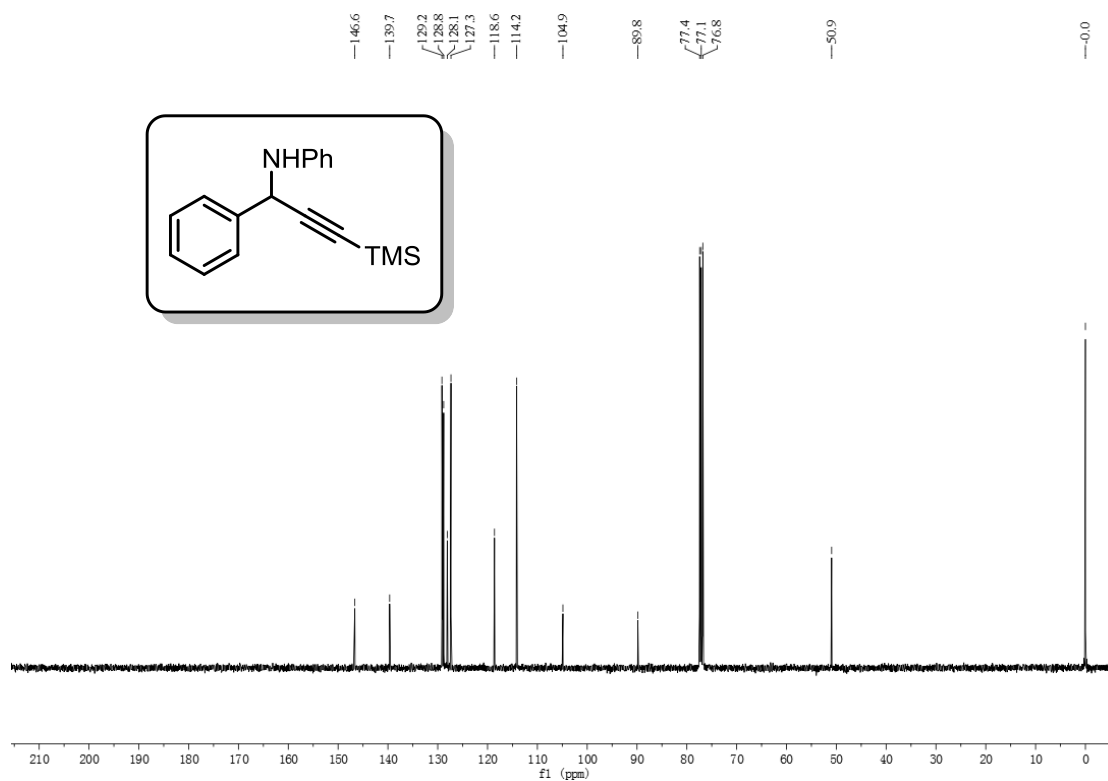
¹³C NMR Spectrum of (3-bromooct-1-yn-1-yl)trimethylsilane 6a



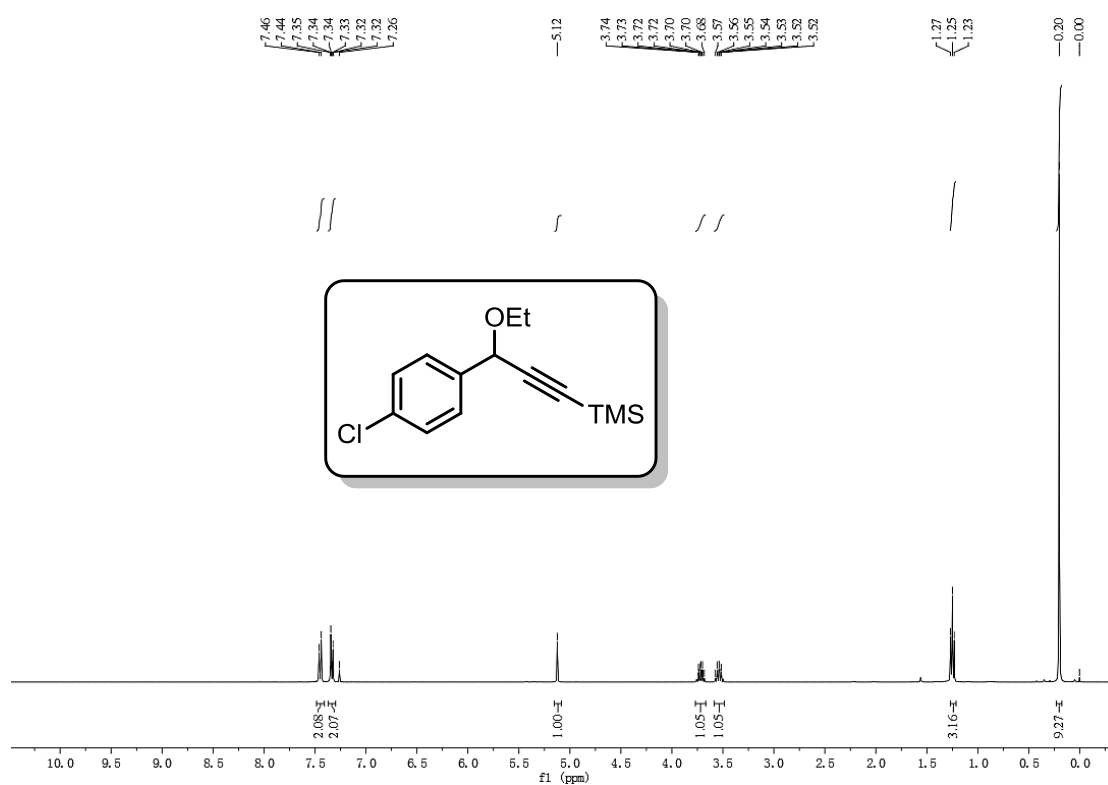
¹H NMR Spectrum of *N*-(1-phenyl-3-(trimethylsilyl)prop-2-yn-1-yl)aniline 6b



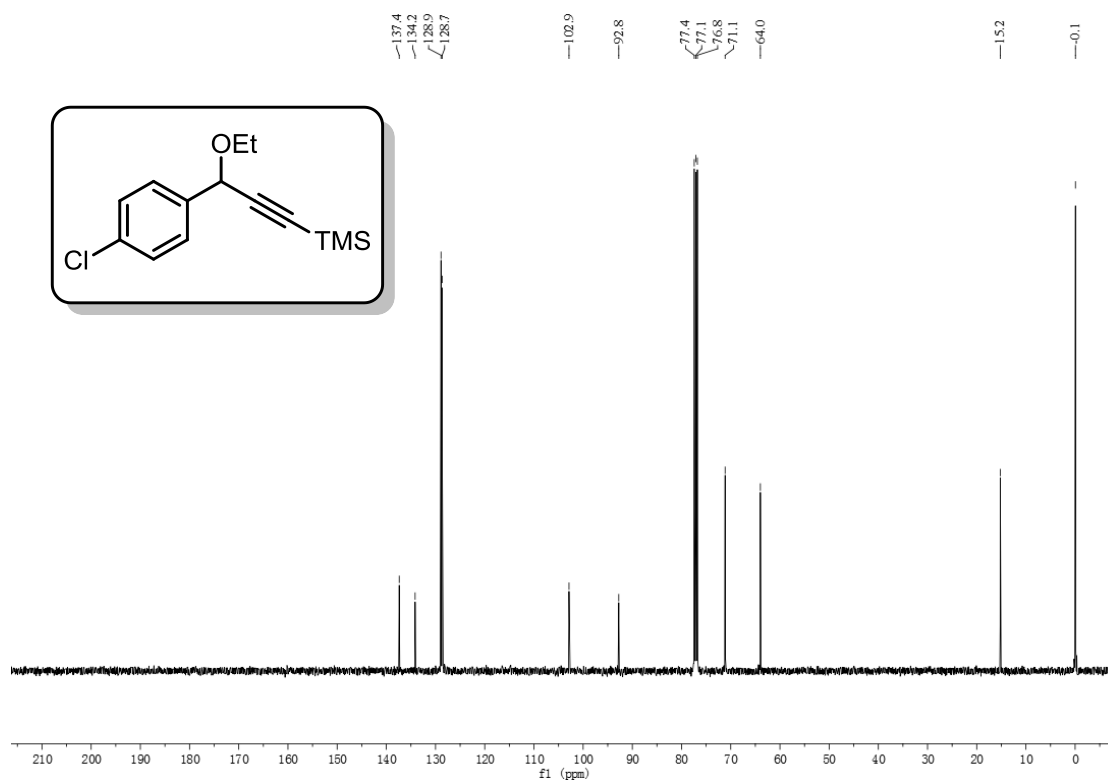
¹³C NMR Spectrum of *N*-(1-phenyl-3-(trimethylsilyl)prop-2-yn-1-yl)aniline 6b



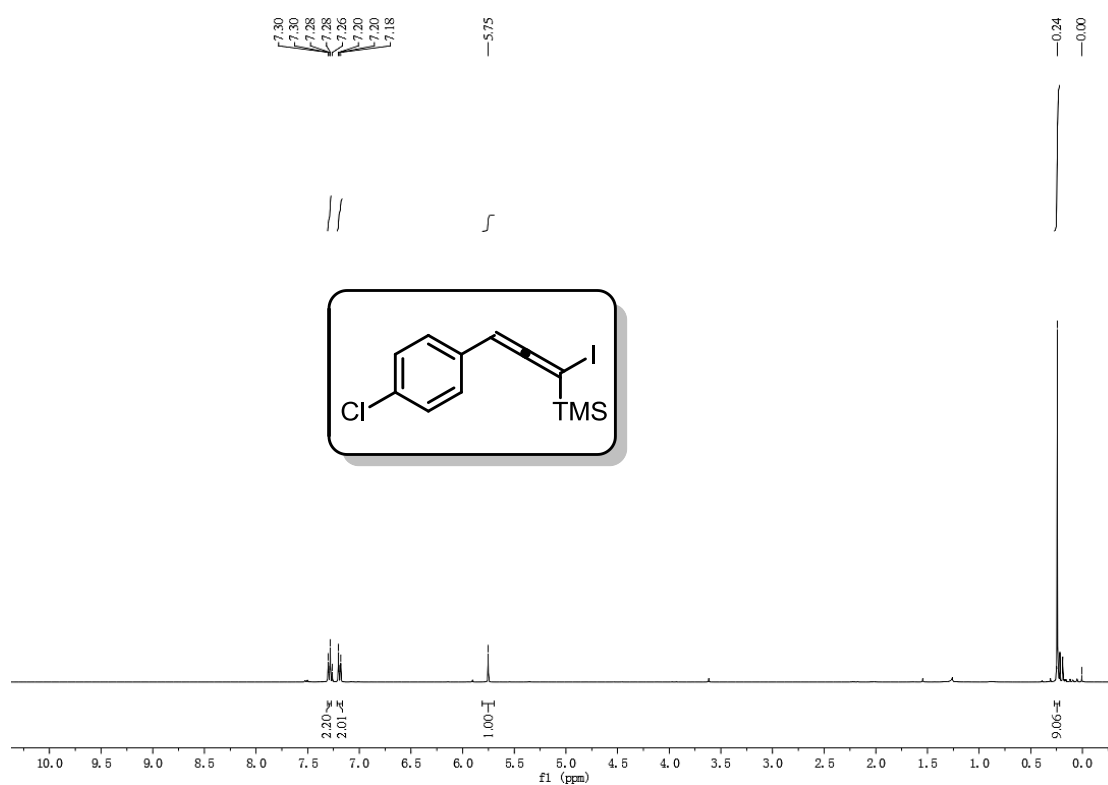
¹H NMR Spectrum of (3-(4-chlorophenyl)-3-ethoxyprop-1-yn-1-yl)trimethylsilane 6c



¹³C NMR Spectrum of (3-(4-chlorophenyl)-3-ethoxyprop-1-yn-1-yl)trimethylsilane 6c



^1H NMR Spectrum of (3-(4-chlorophenyl)-1-iodopropa-1,2-dien-1-yl)trimethylsilane 6d



^{13}C NMR Spectrum of (3-(4-chlorophenyl)-1-iodopropa-1,2-dien-1-yl)trimethylsilane 6d

