

Supplementary Information

**Beyond classic acetylene chemistry: base-mediated self-organization of acetylenes with
nitriles to rarely functionalized dihydropyridinimines**

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Boris A. Trofimov*

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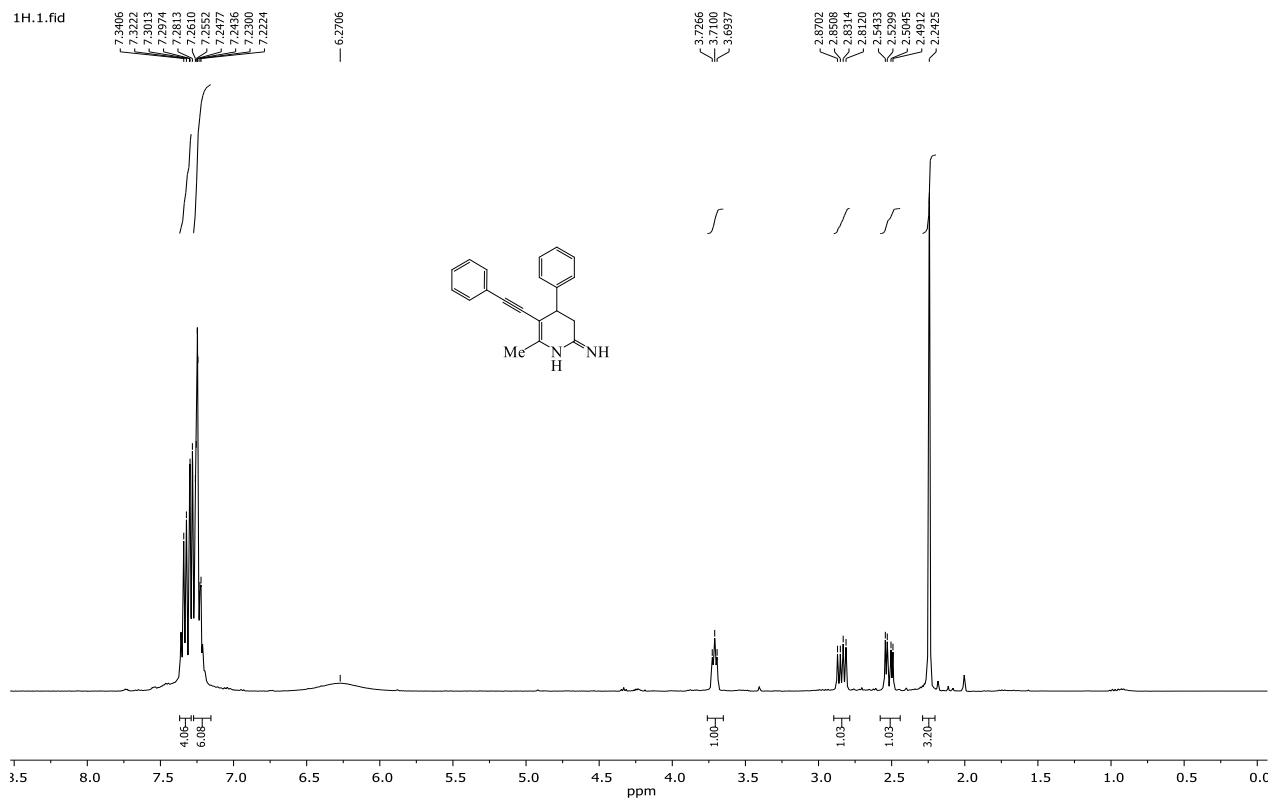
E-mail: boris_trofimov@irioch.irk.ru

Table of Contents

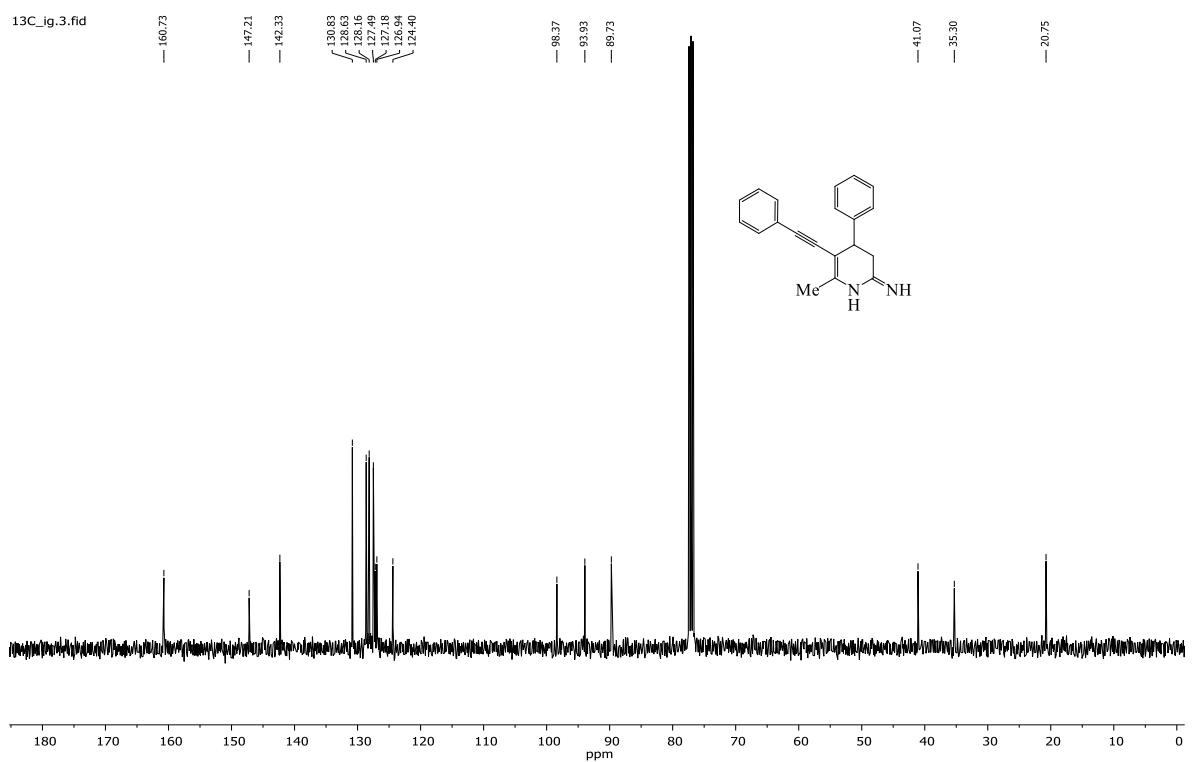
NMR Spectra.....	2
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NMR Spectra

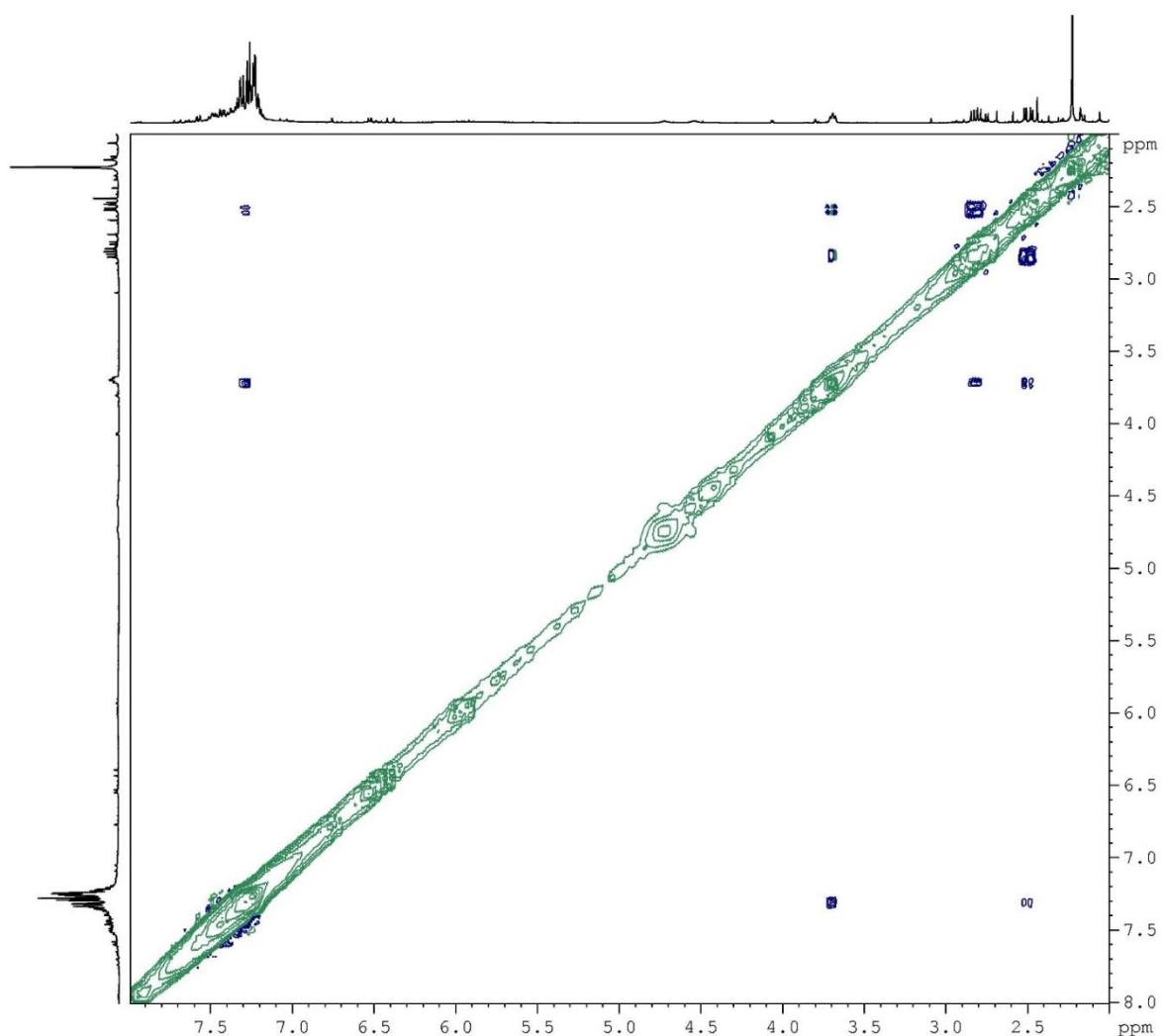
¹H NMR Spectrum of 3aa (400.1 MHz, CDCl₃)



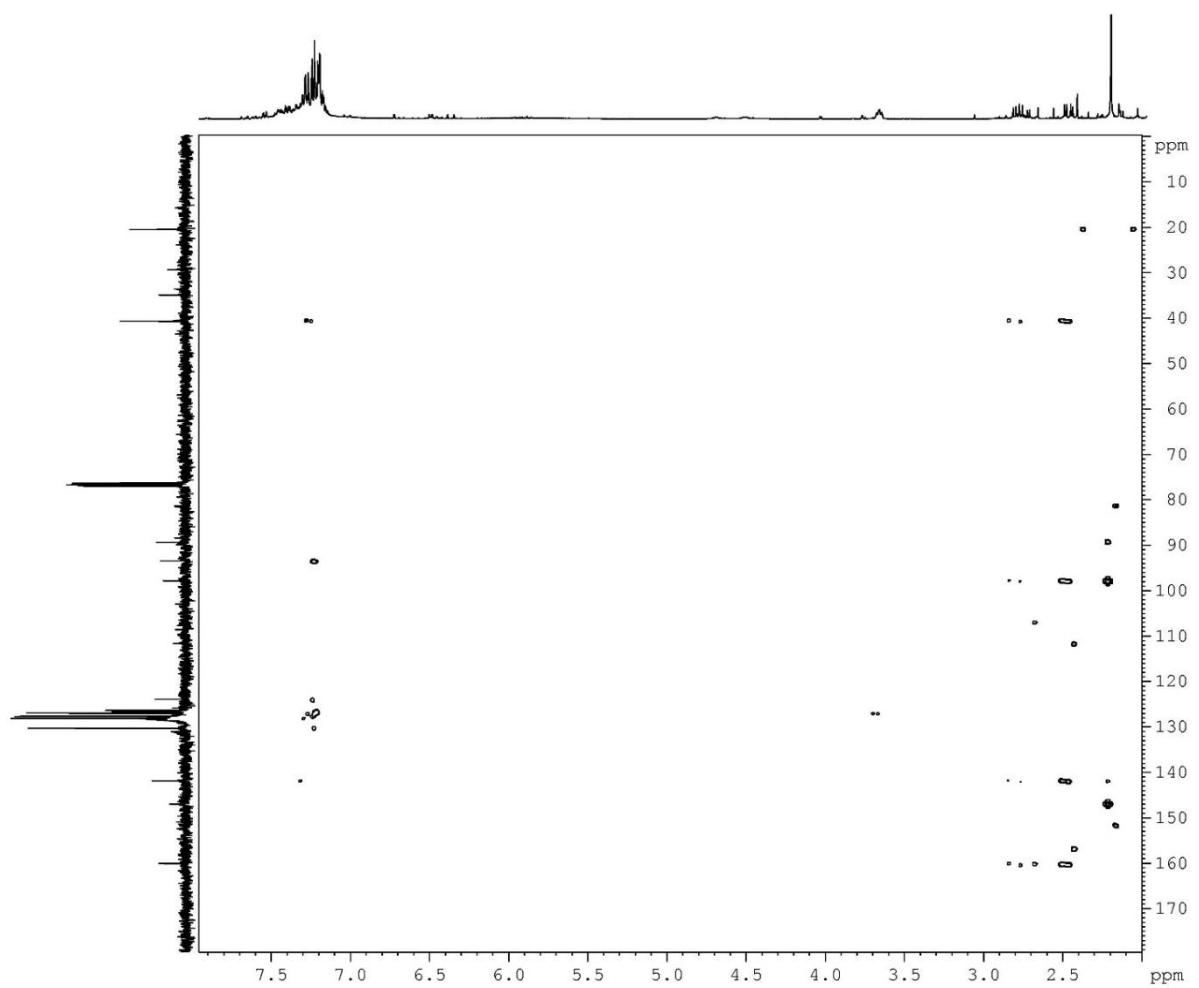
$^{13}\text{C}\{\text{H}\}$ NMR Spectrum of 3aa (100.6 MHz, CDCl_3)



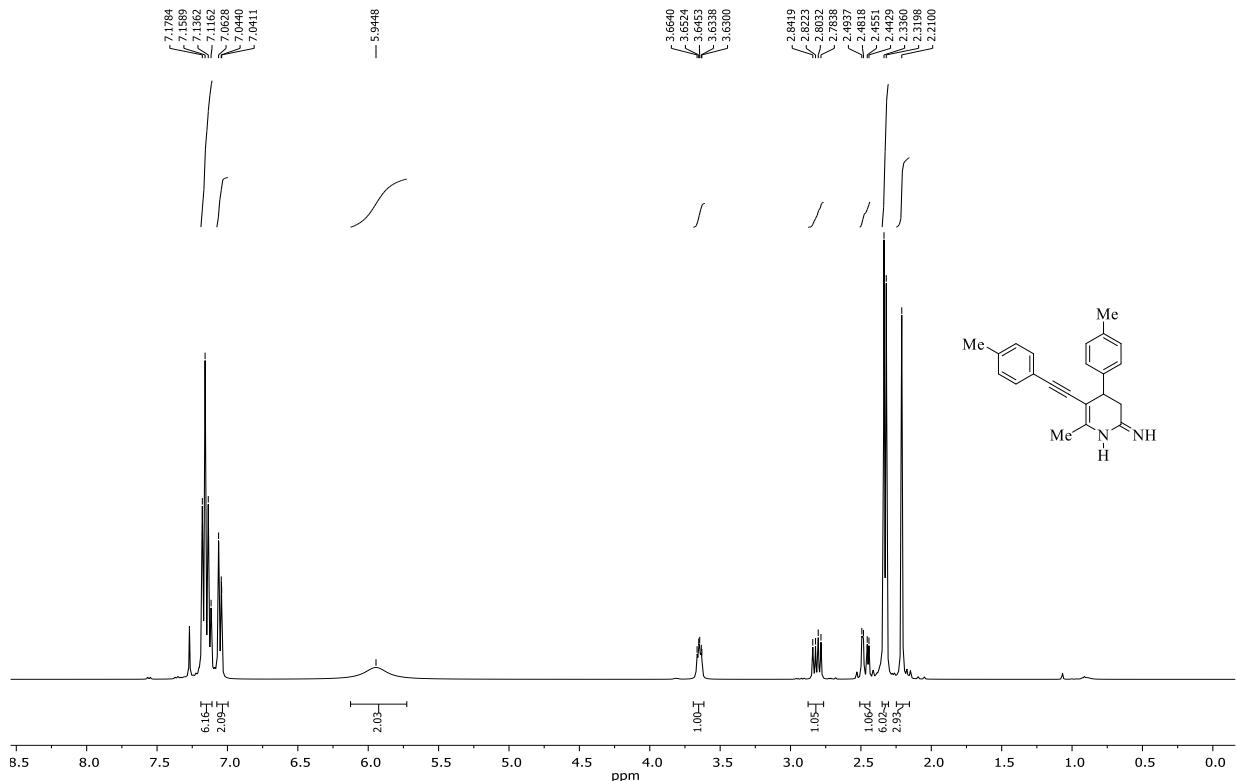
2D NOESY spectrum of 3aa (CDCl_3)



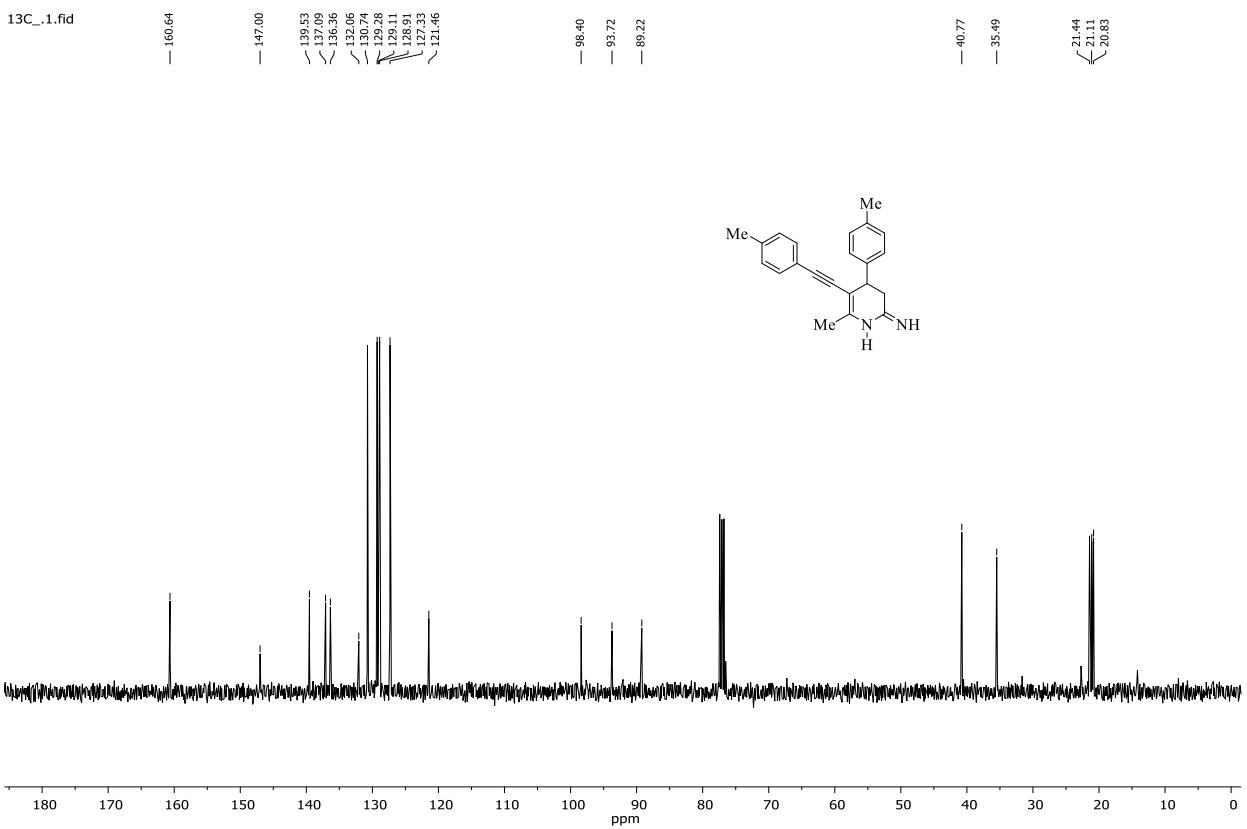
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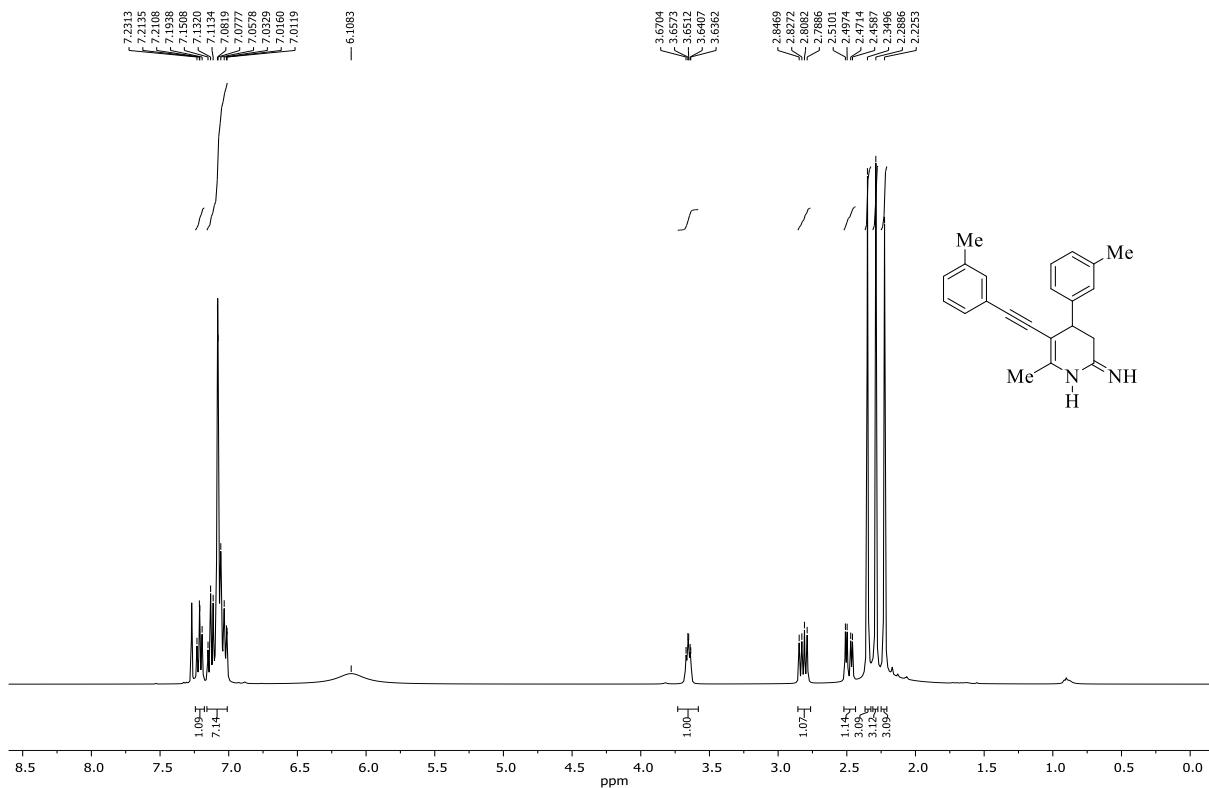
^1H NMR Spectrum of 3ba (400.1 MHz, CDCl_3)



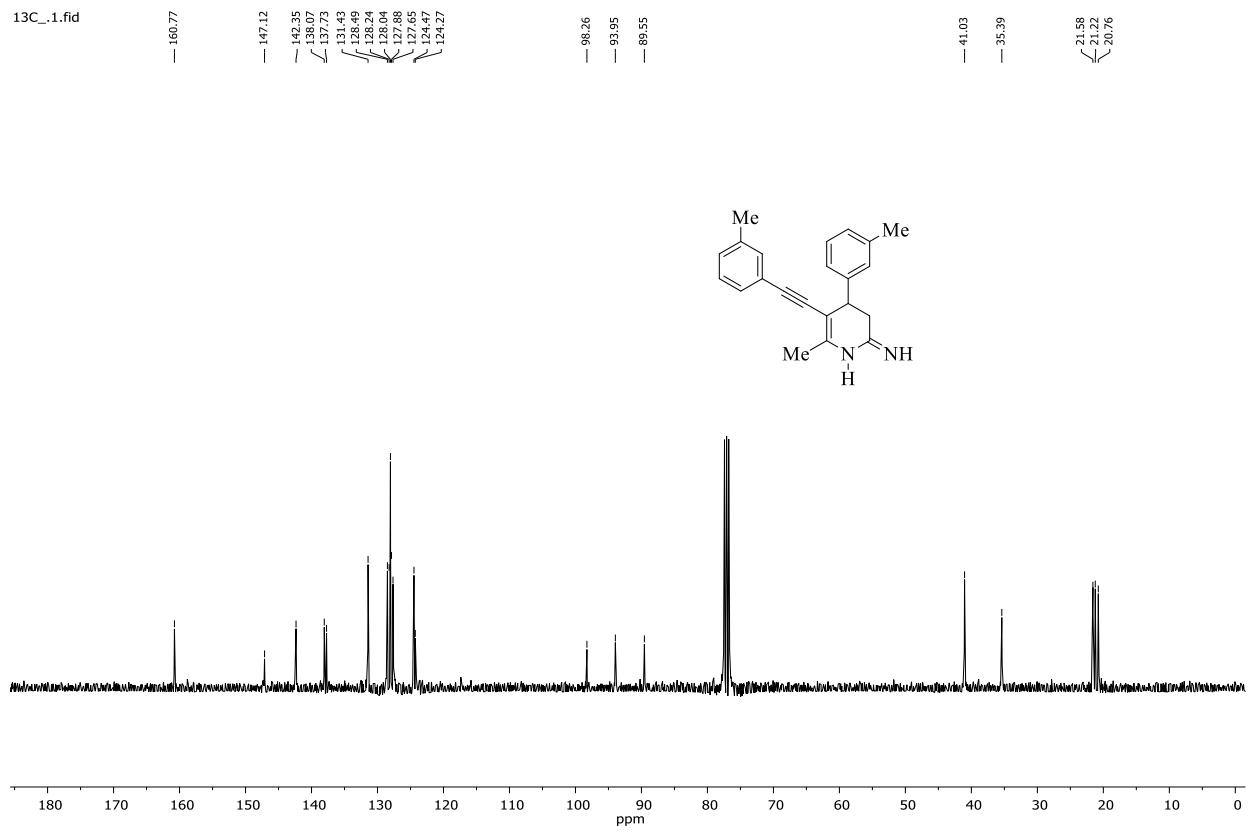
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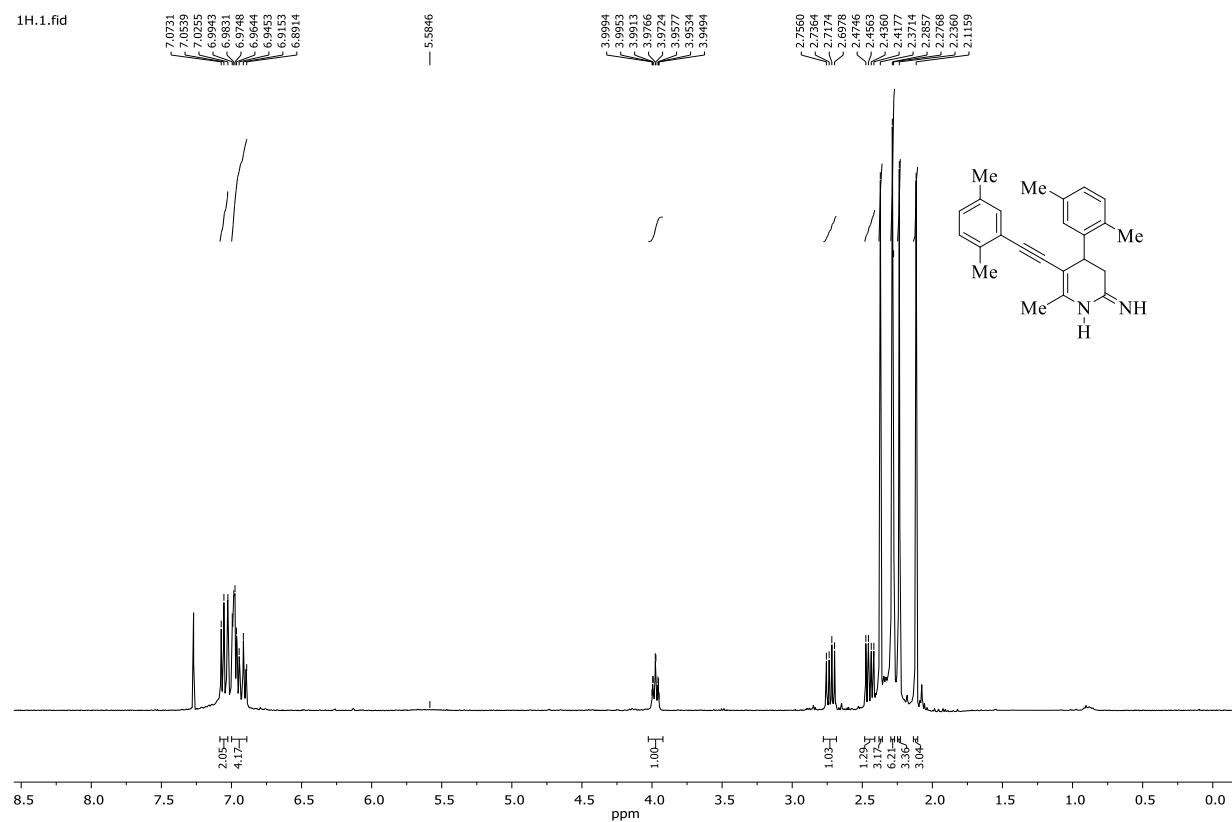
¹H NMR Spectrum of 3ca (400.1 MHz, CDCl₃)



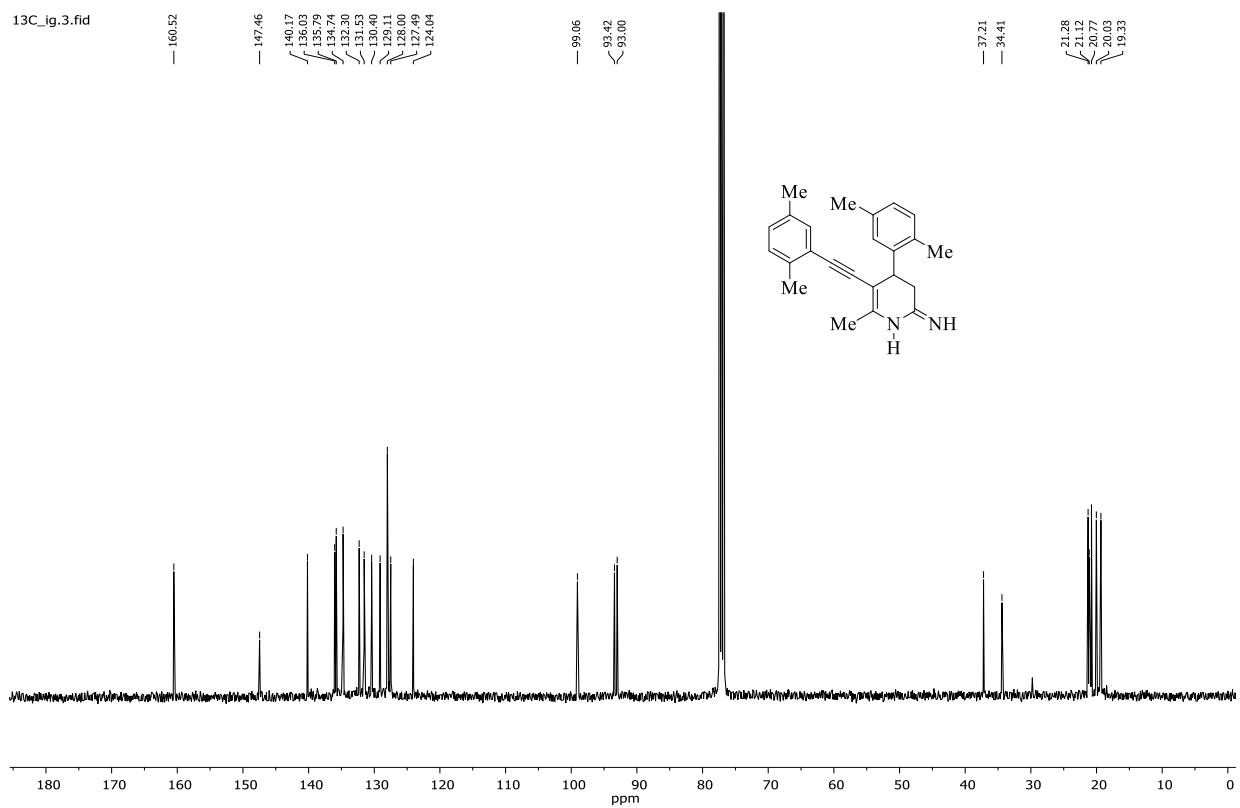
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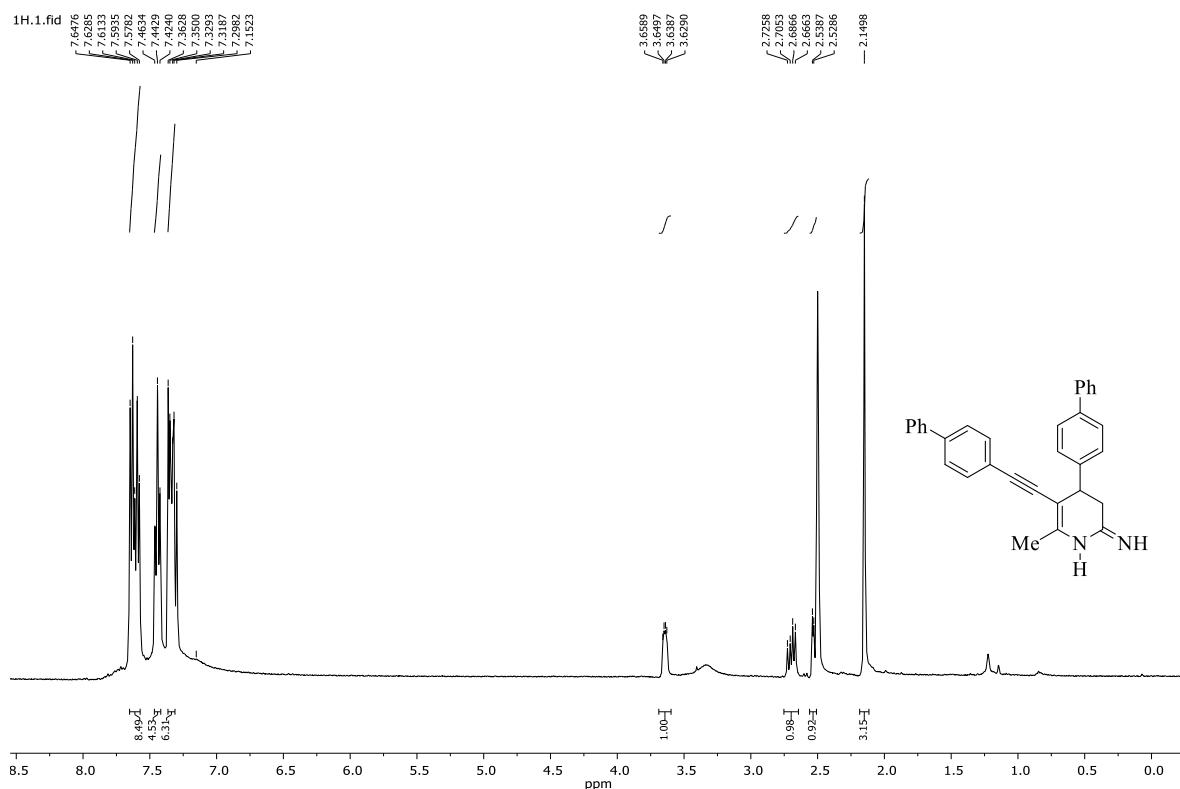
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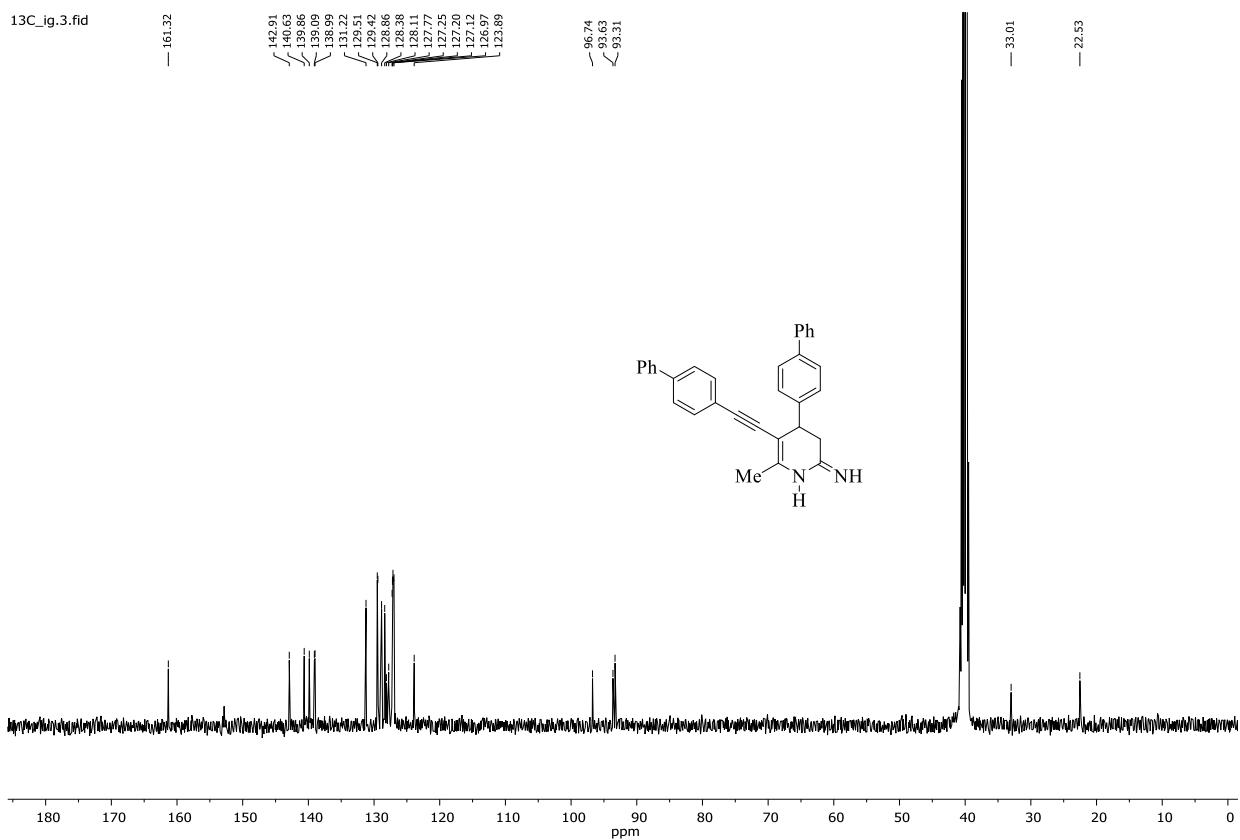
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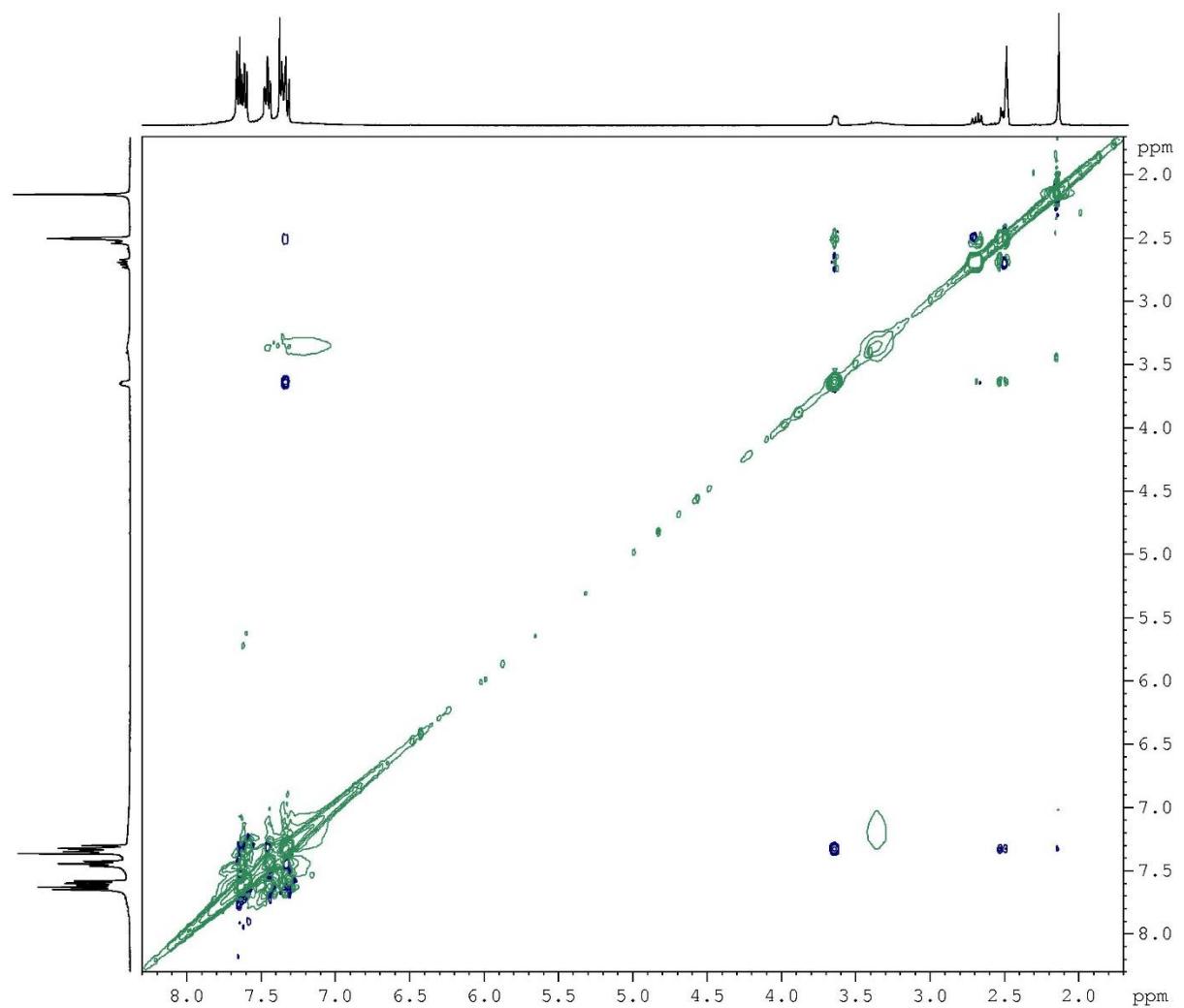
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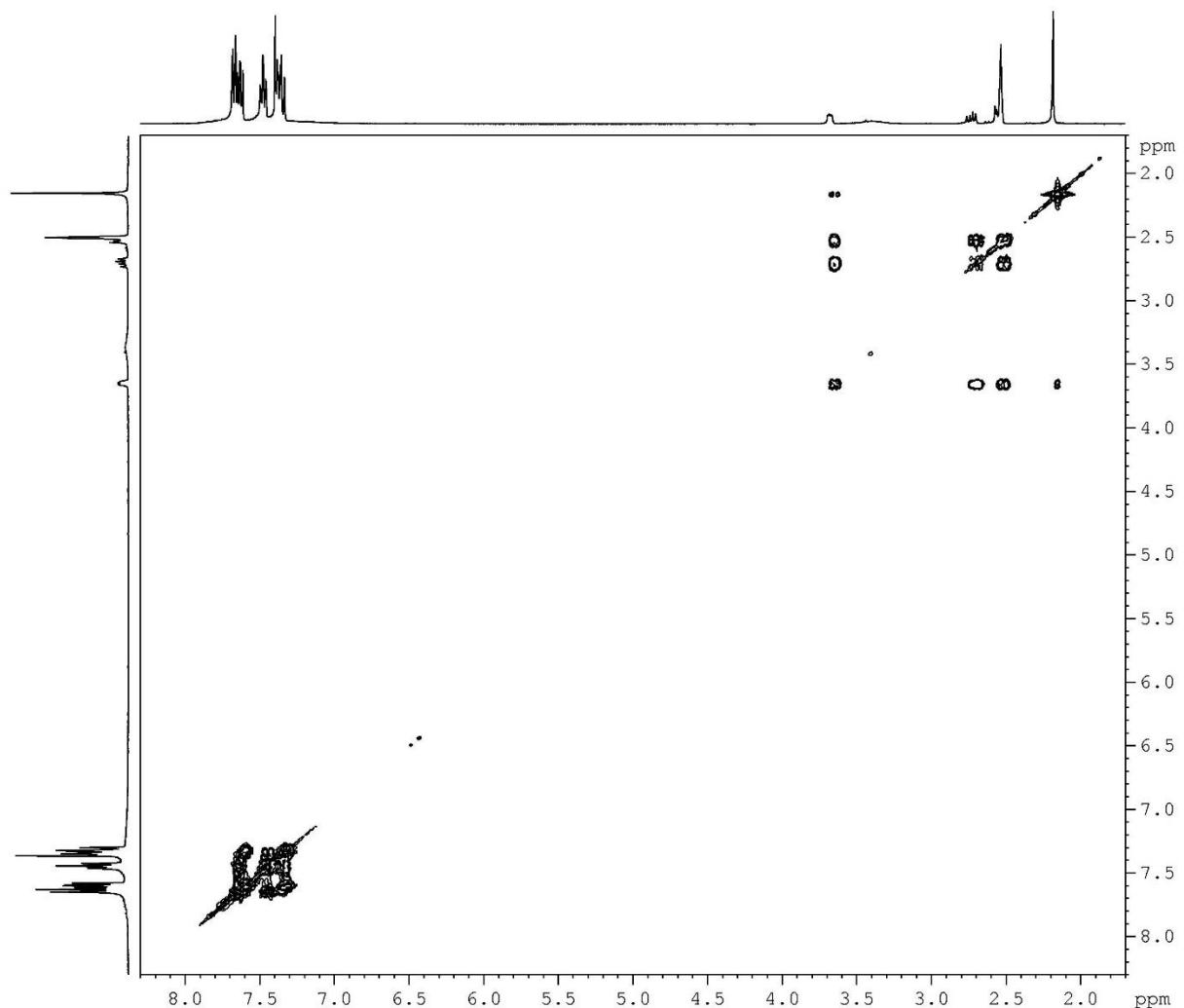
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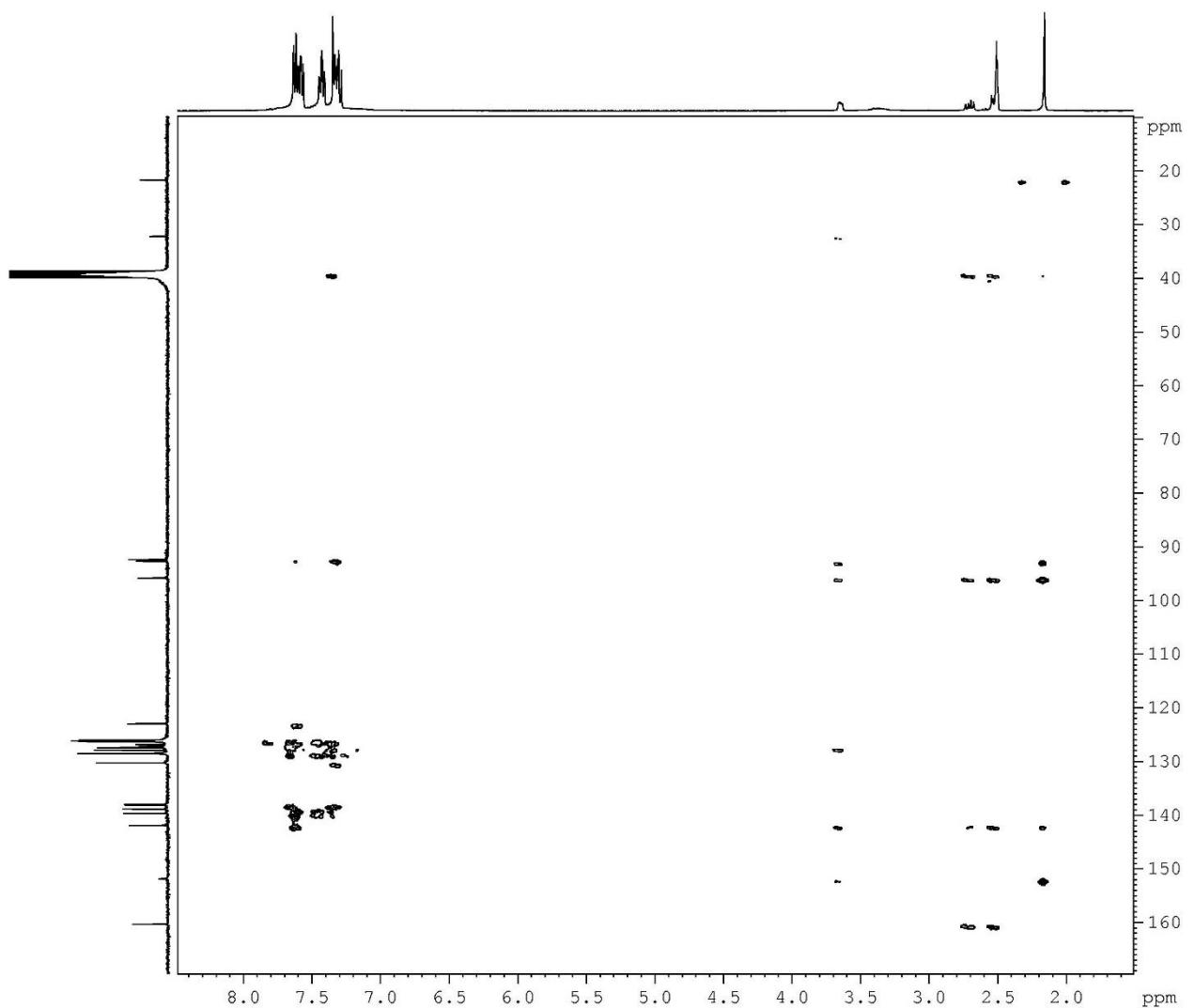
2D NOESY spectrum of 3ea (DMSO-D6)



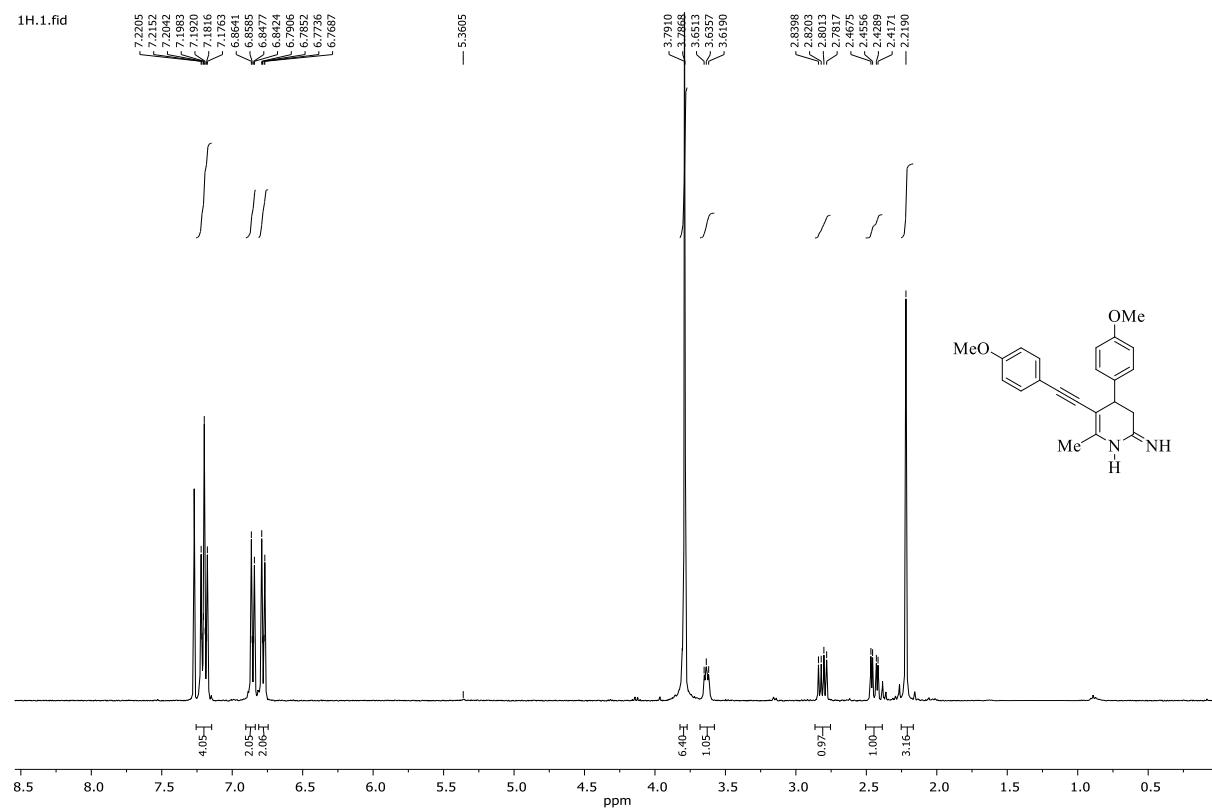
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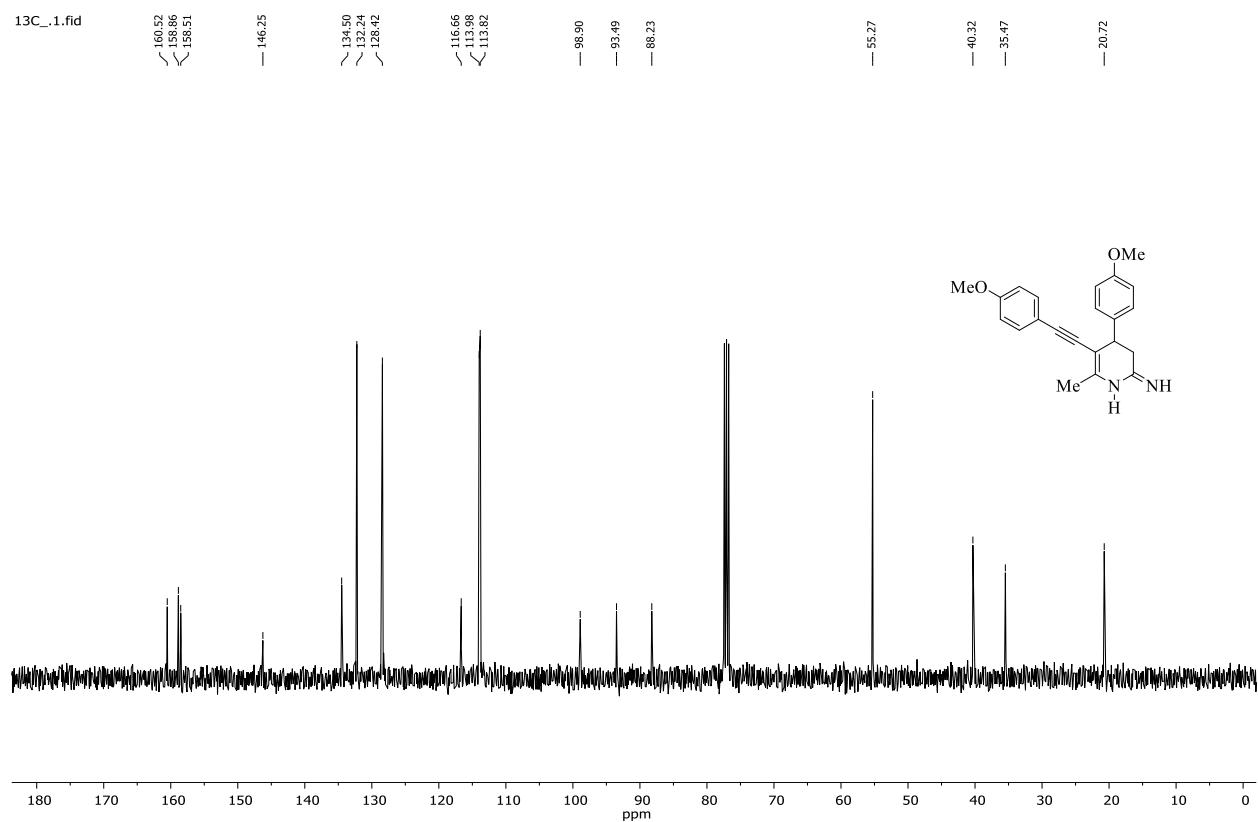
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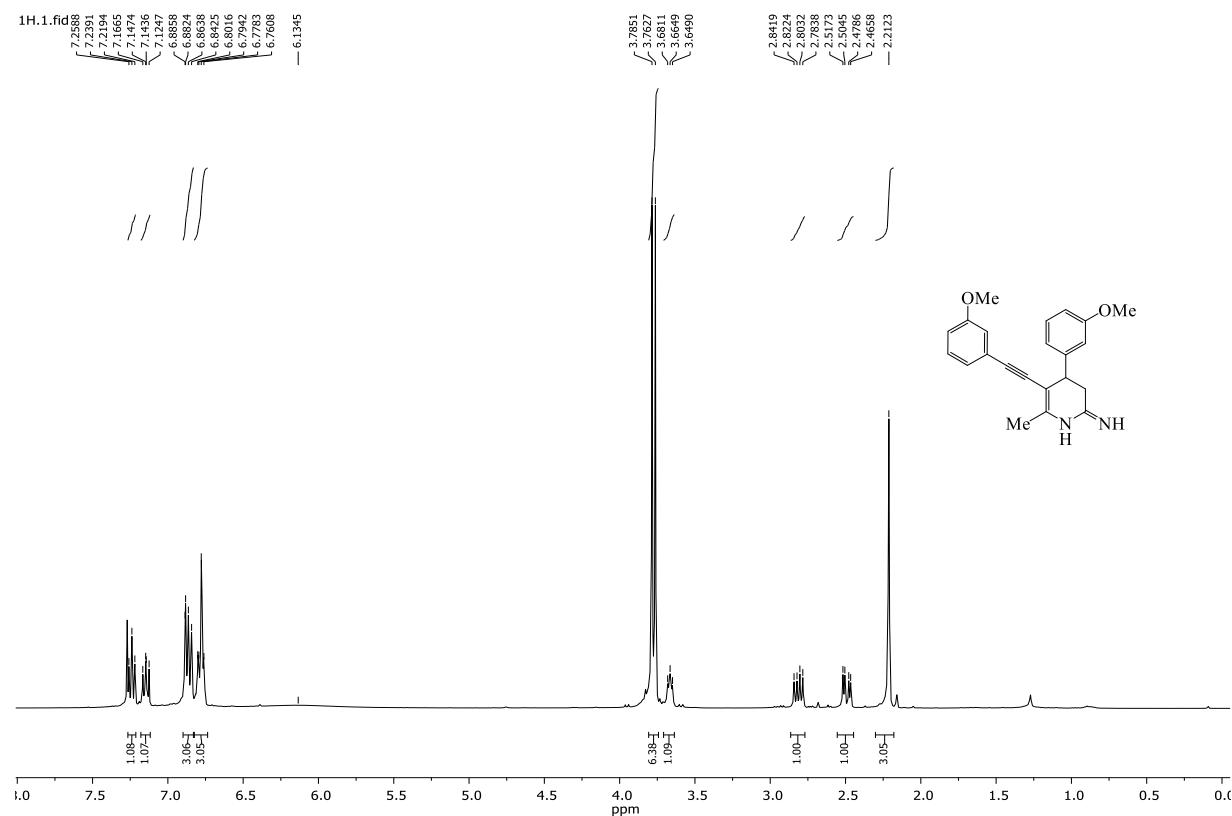
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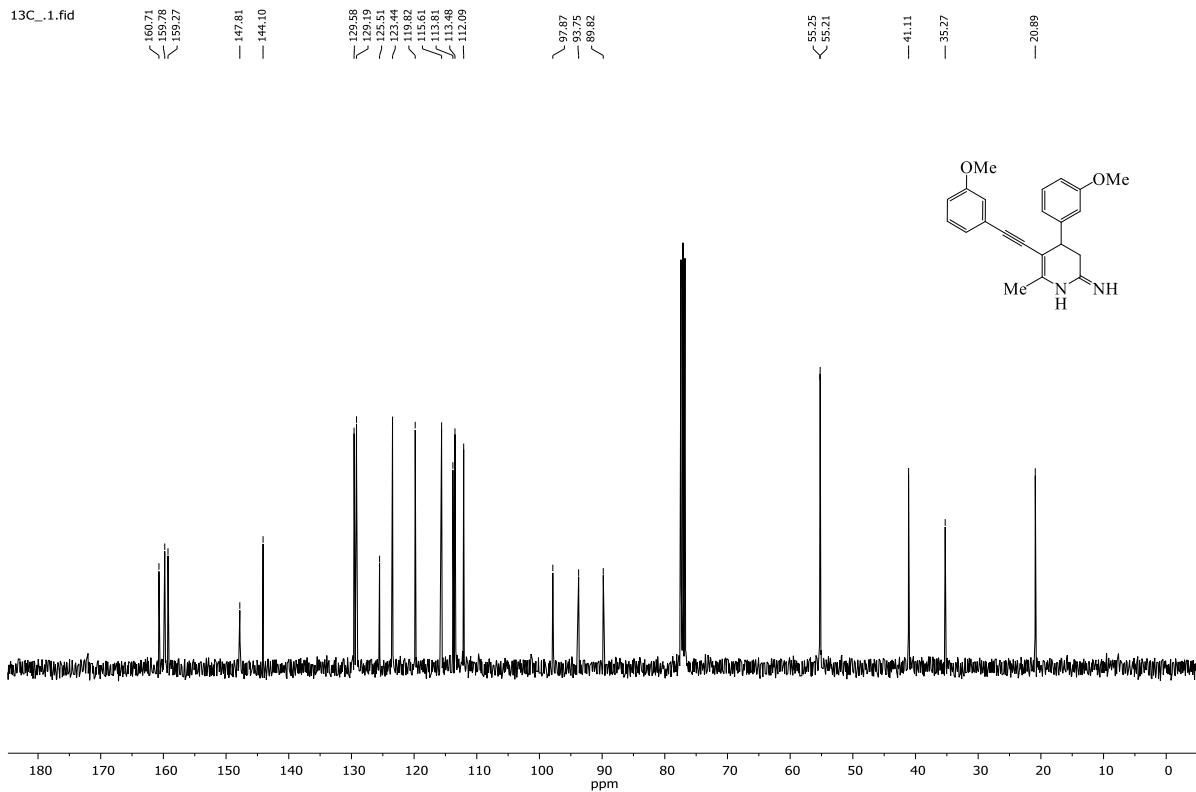
$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum of 3fa (100.6 MHz, CDCl_3)



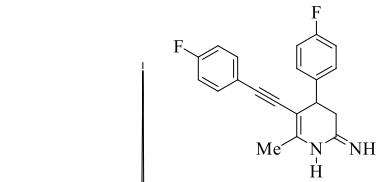
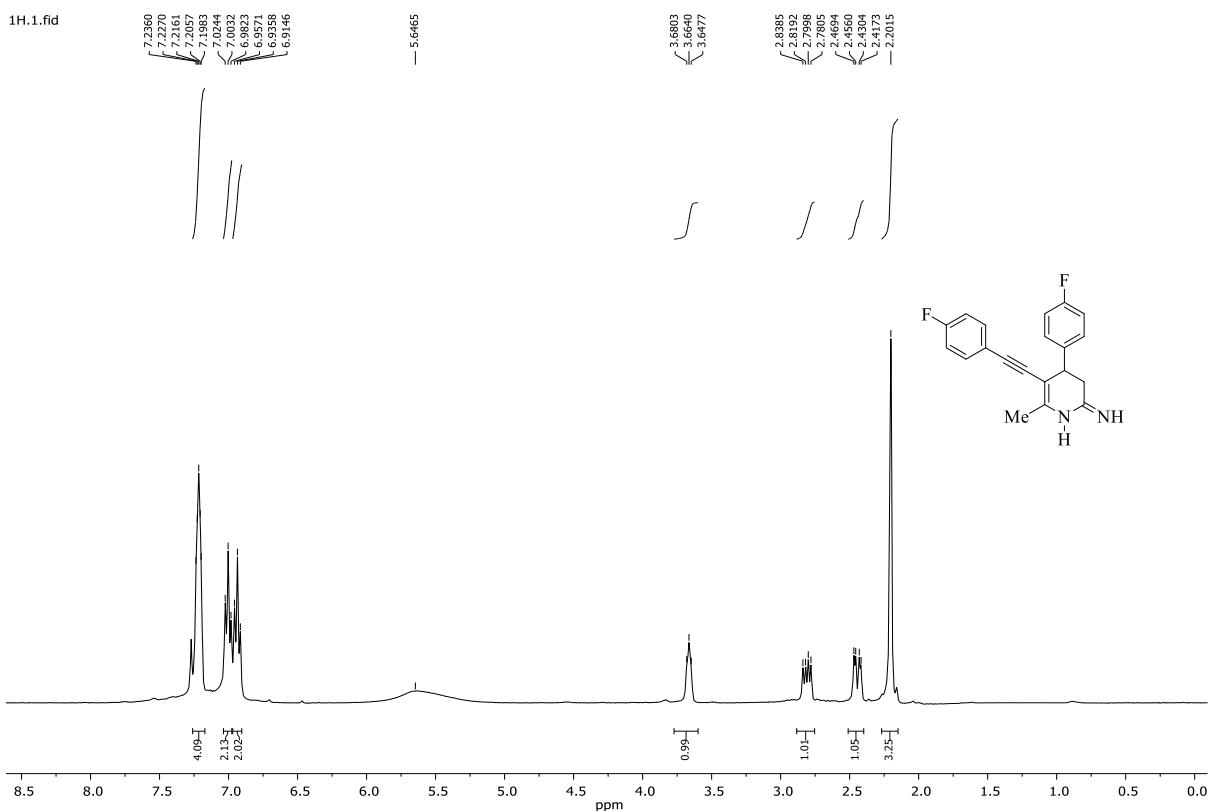
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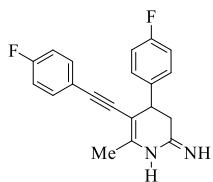
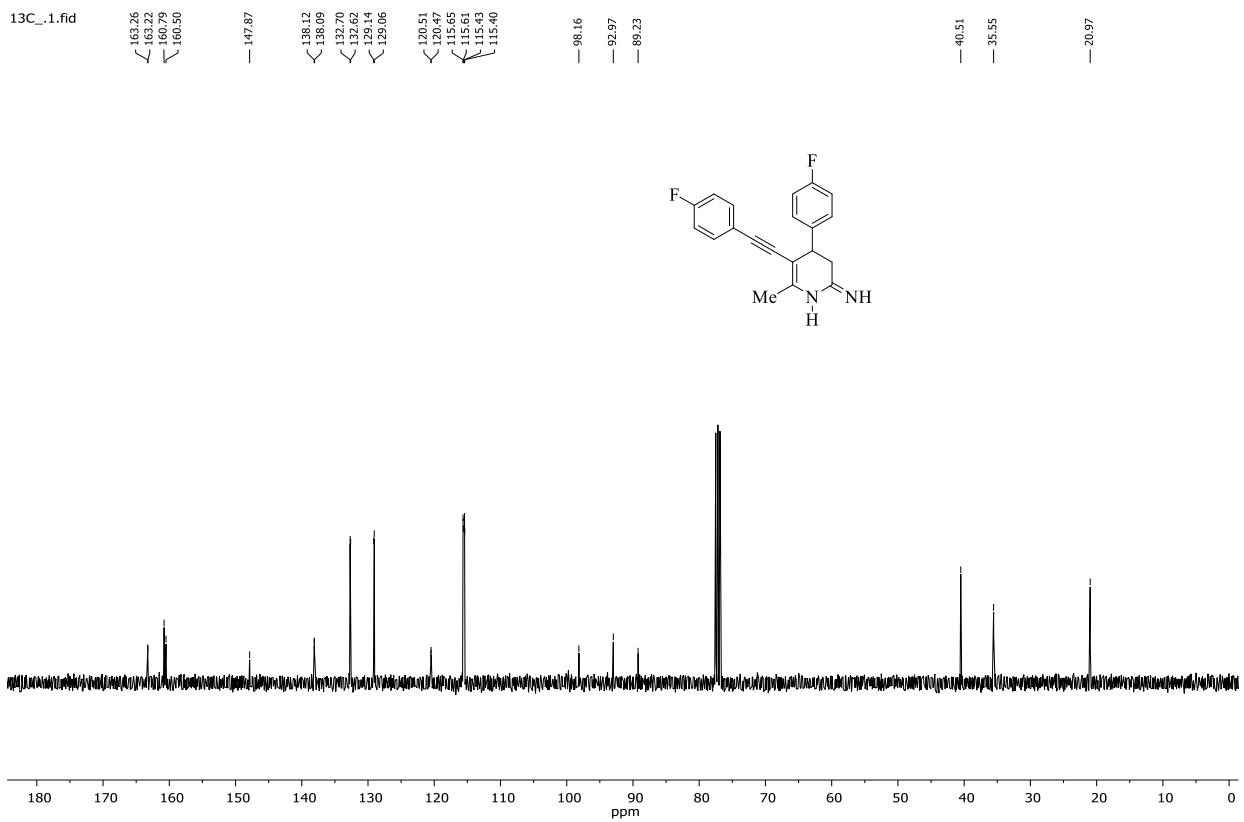
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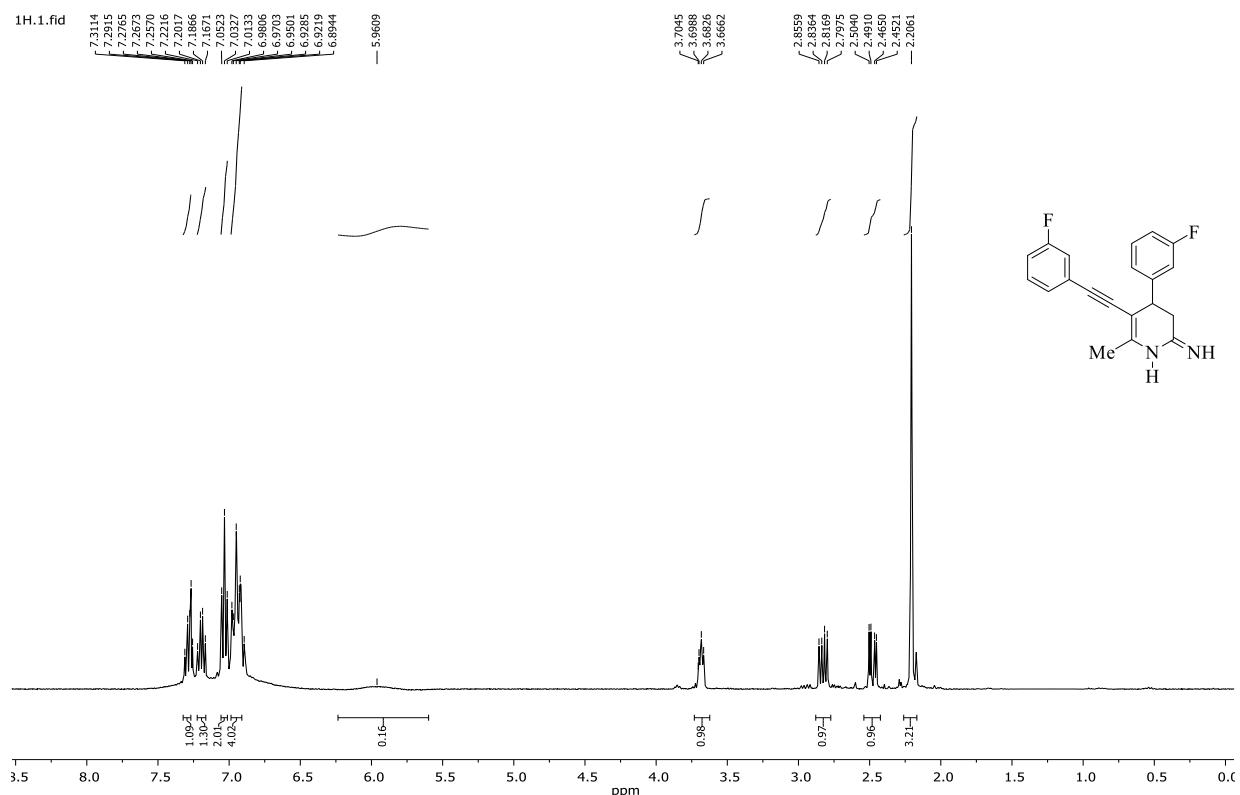
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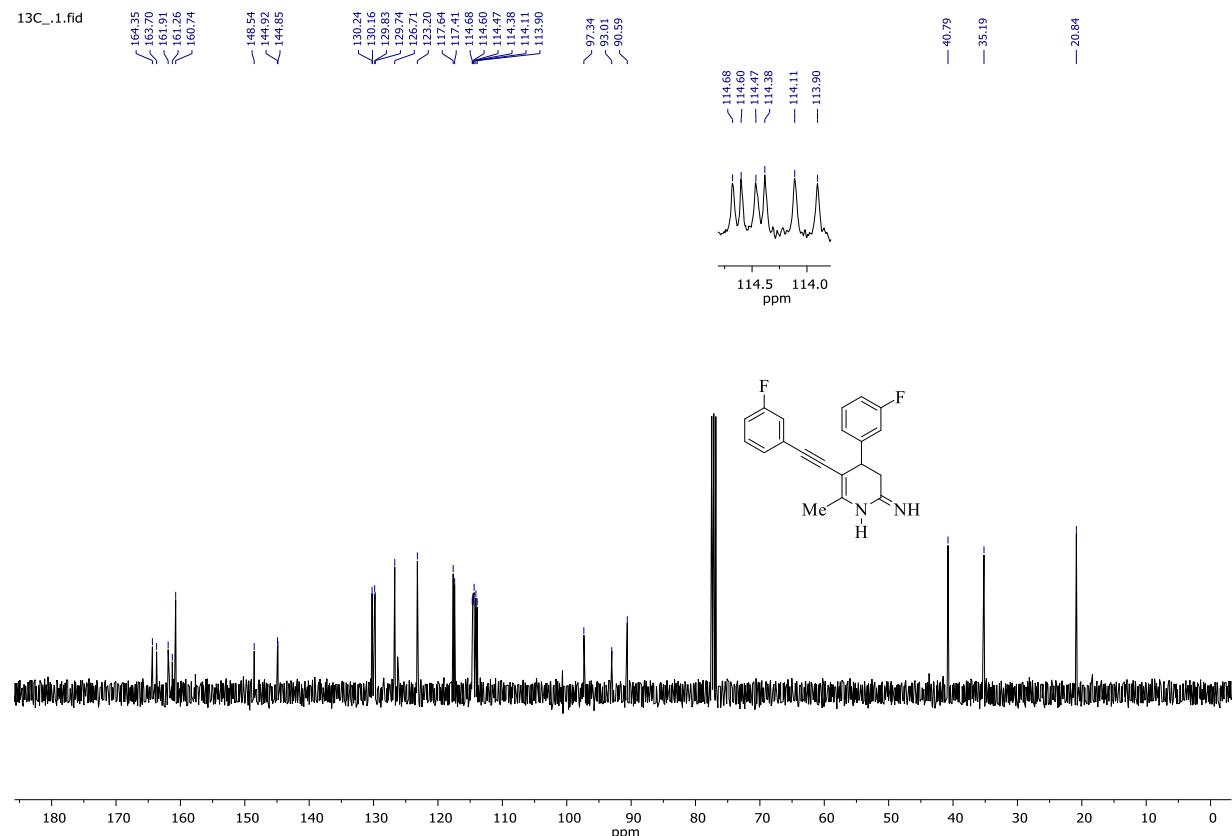
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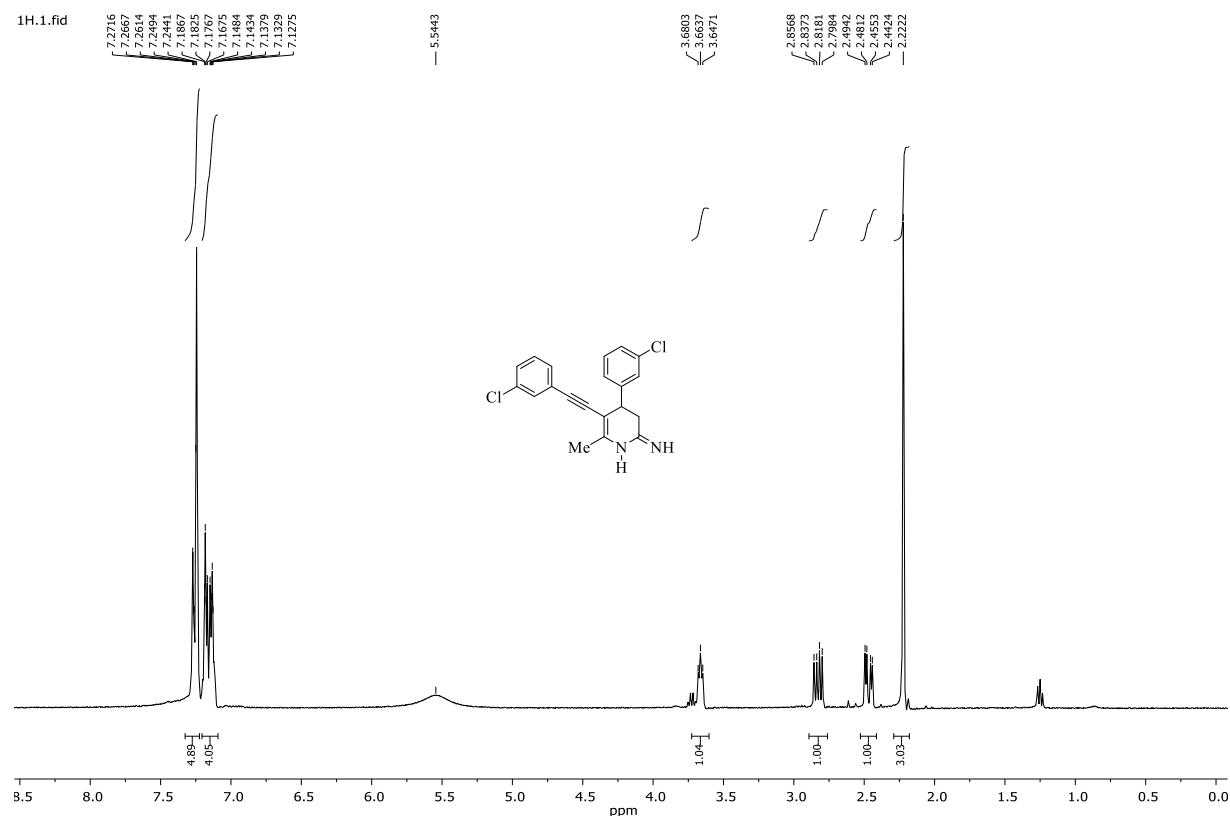
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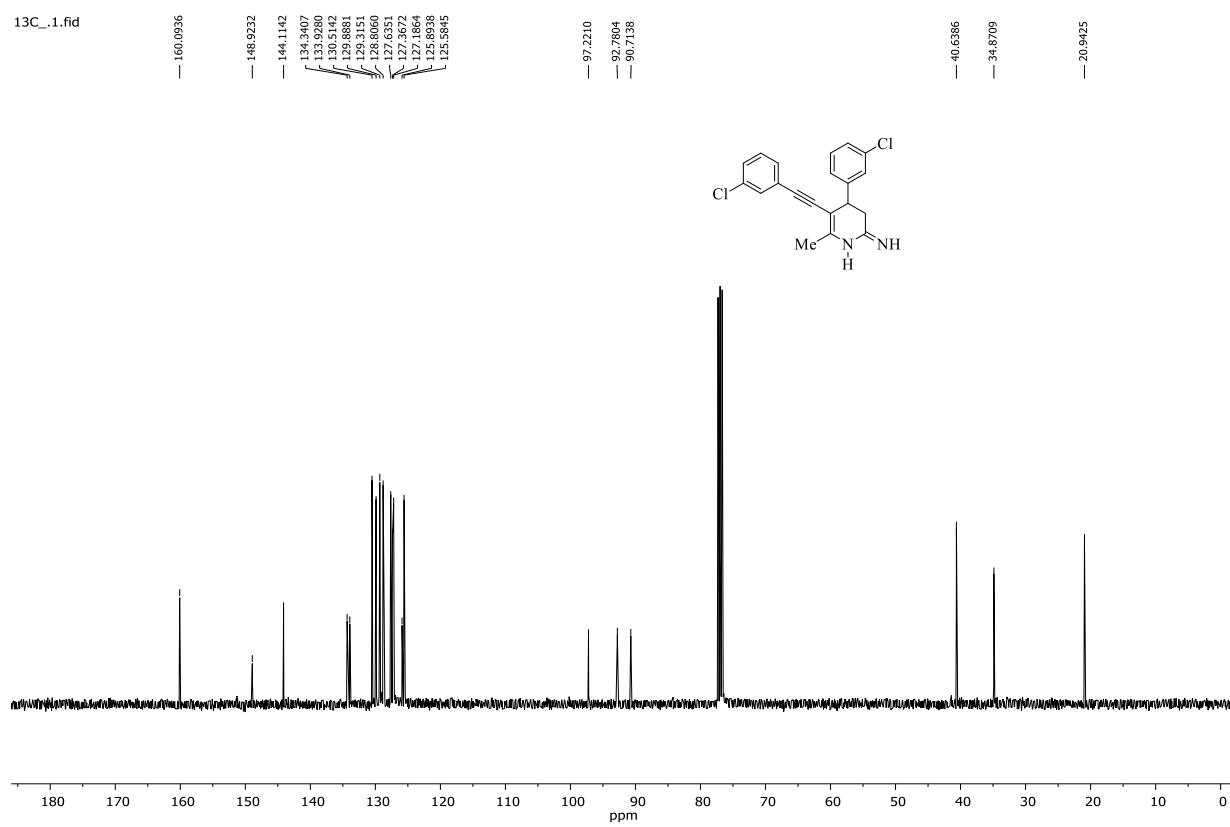
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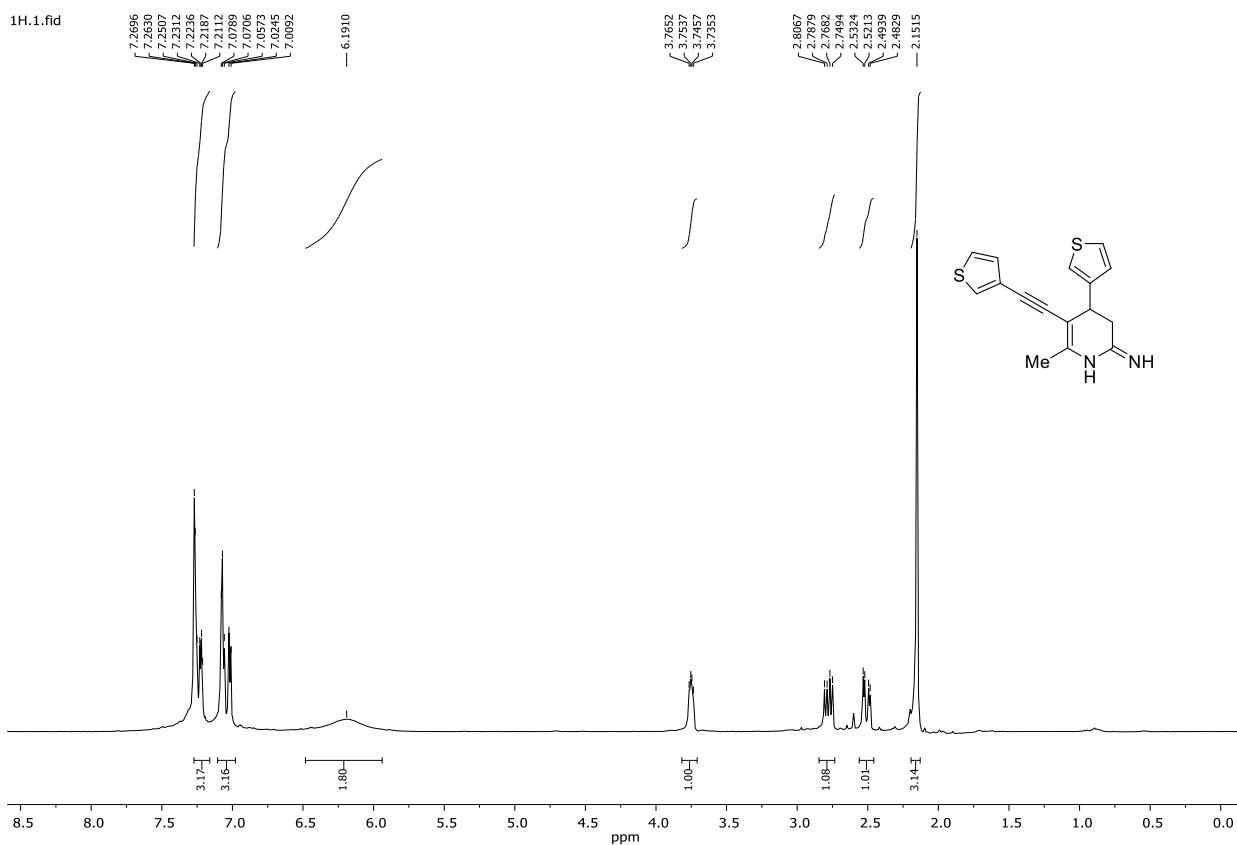
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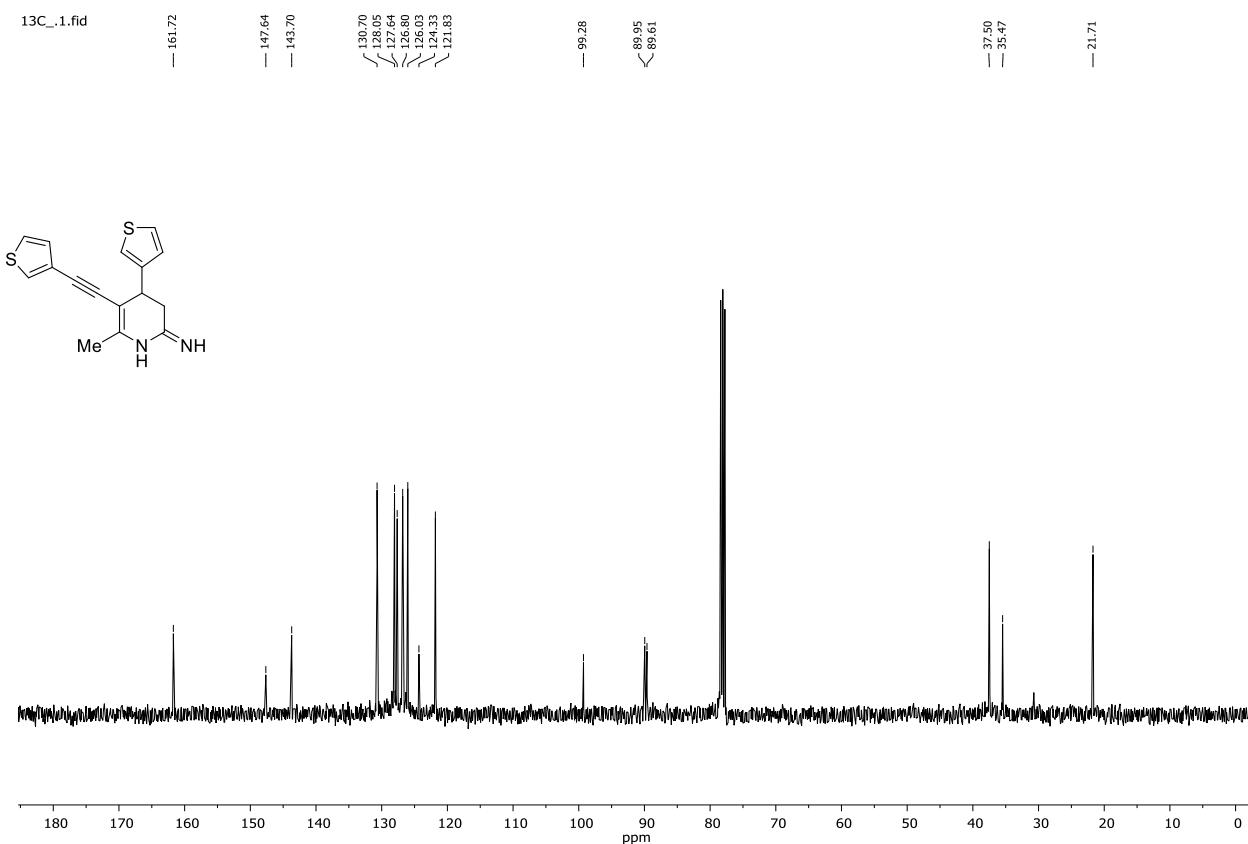
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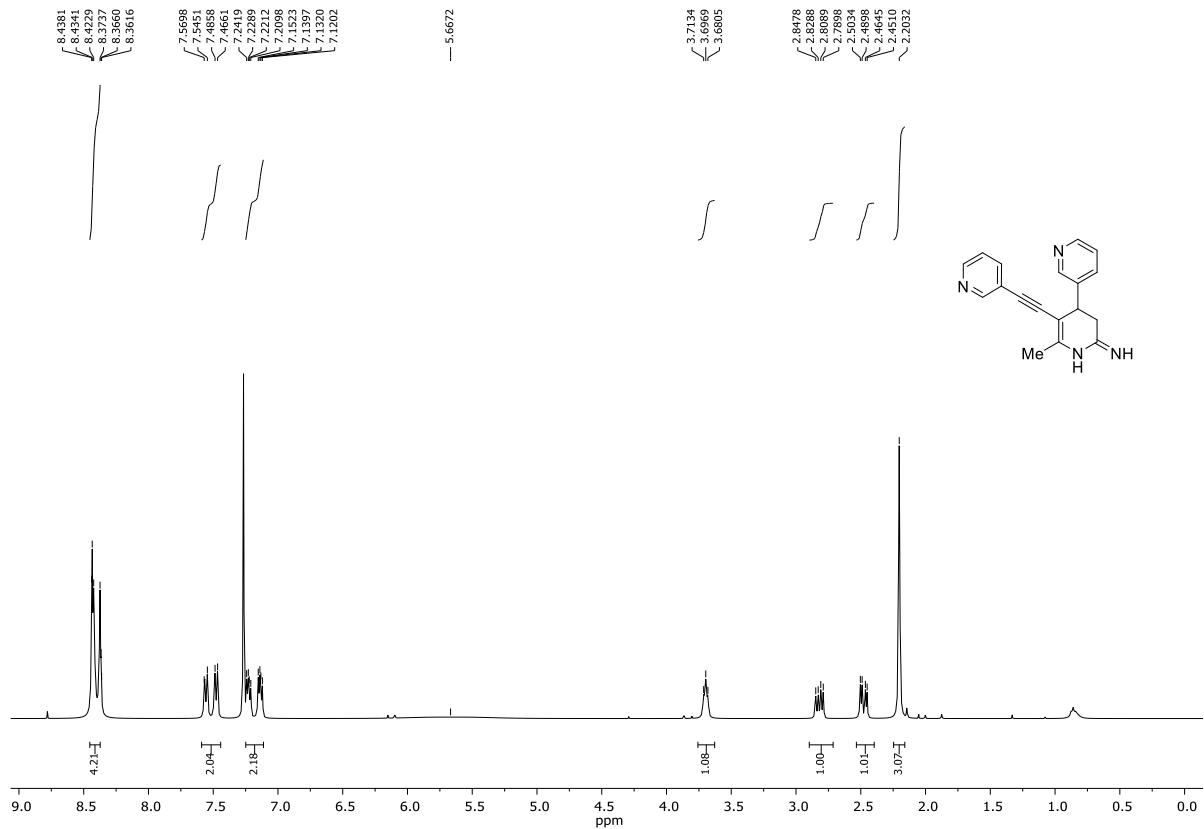
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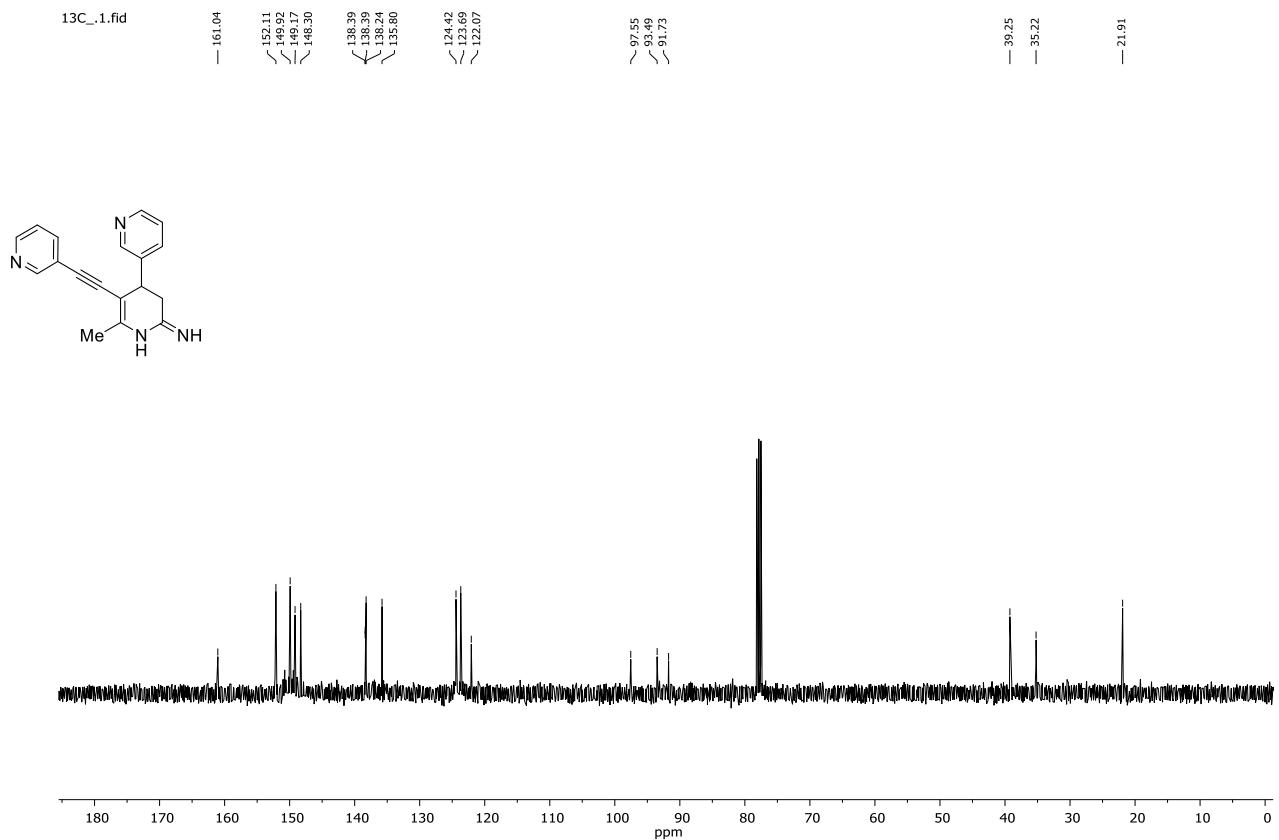
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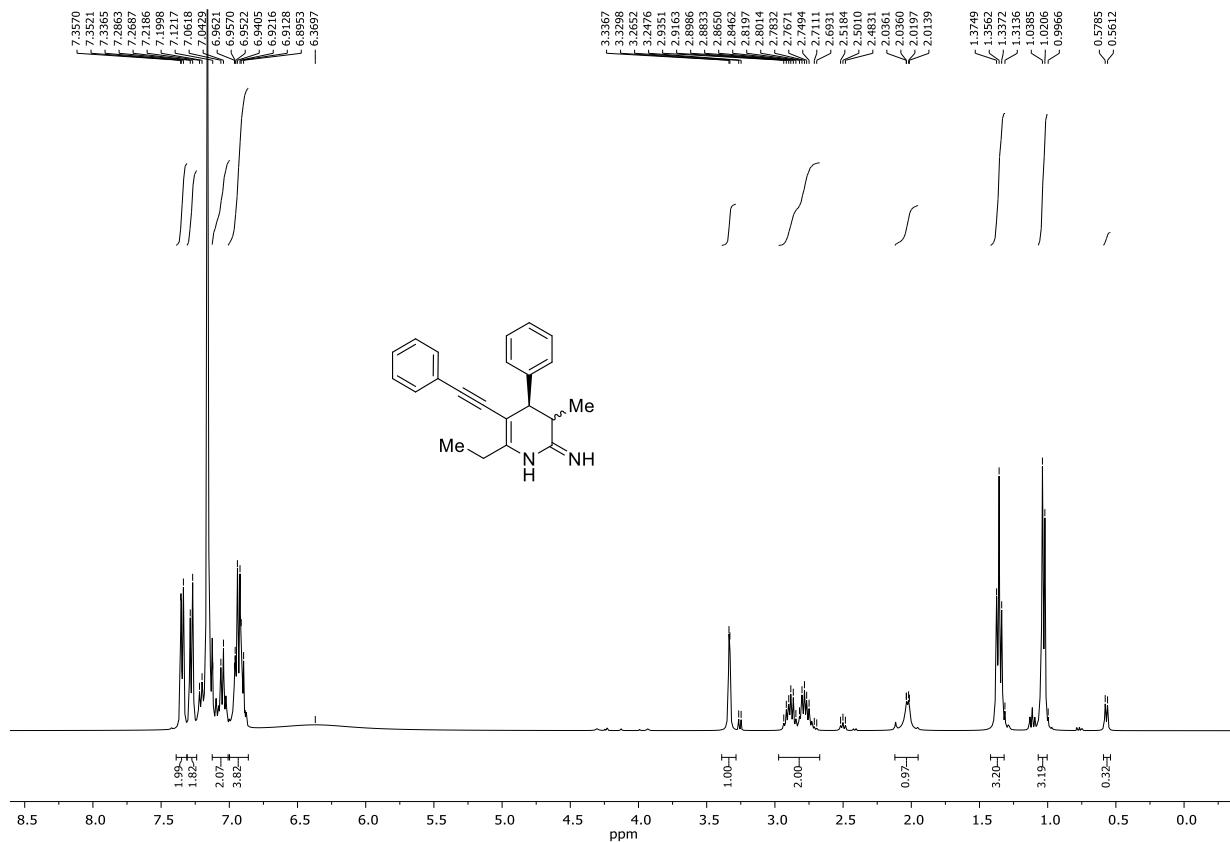
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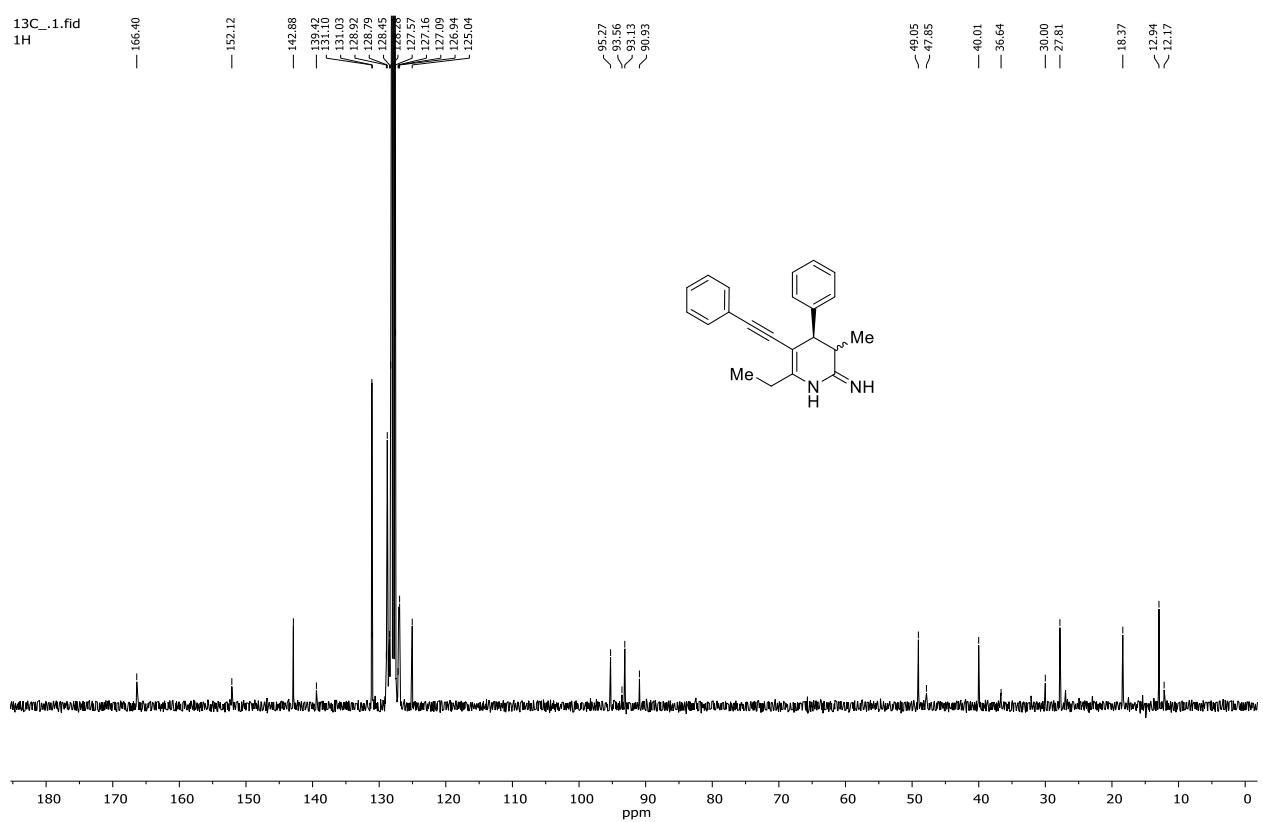
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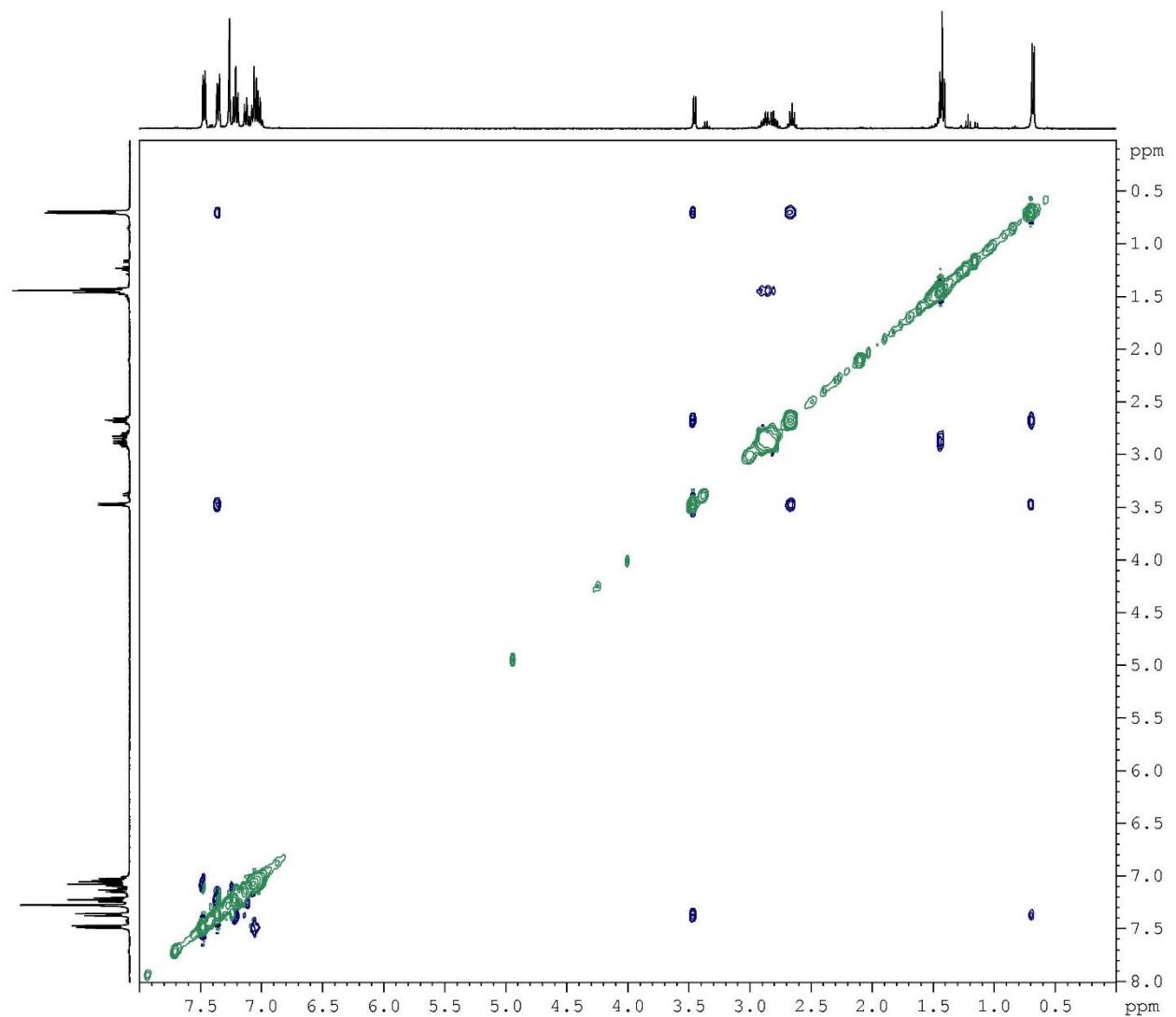
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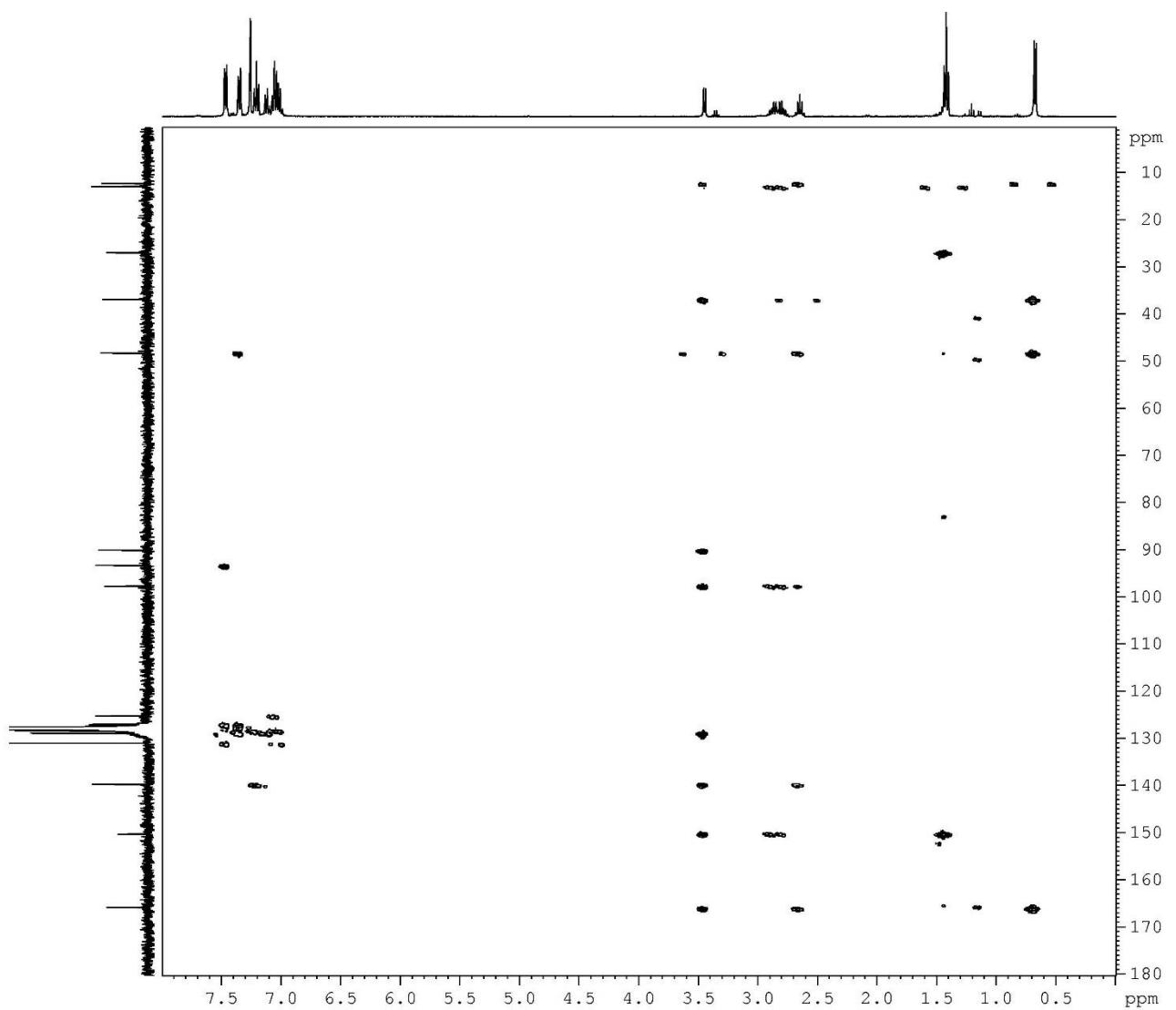
$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum of 3ab (100.6 MHz, C_6D_6)



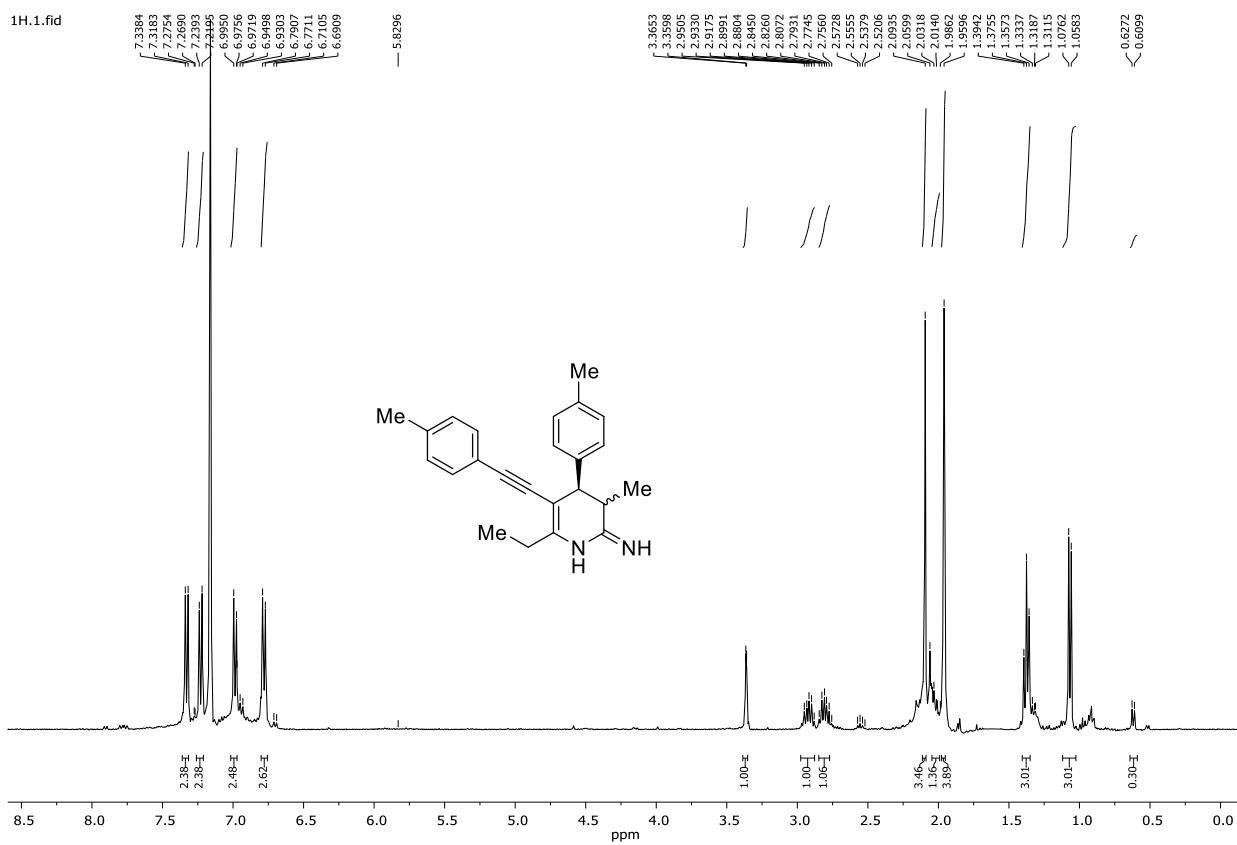
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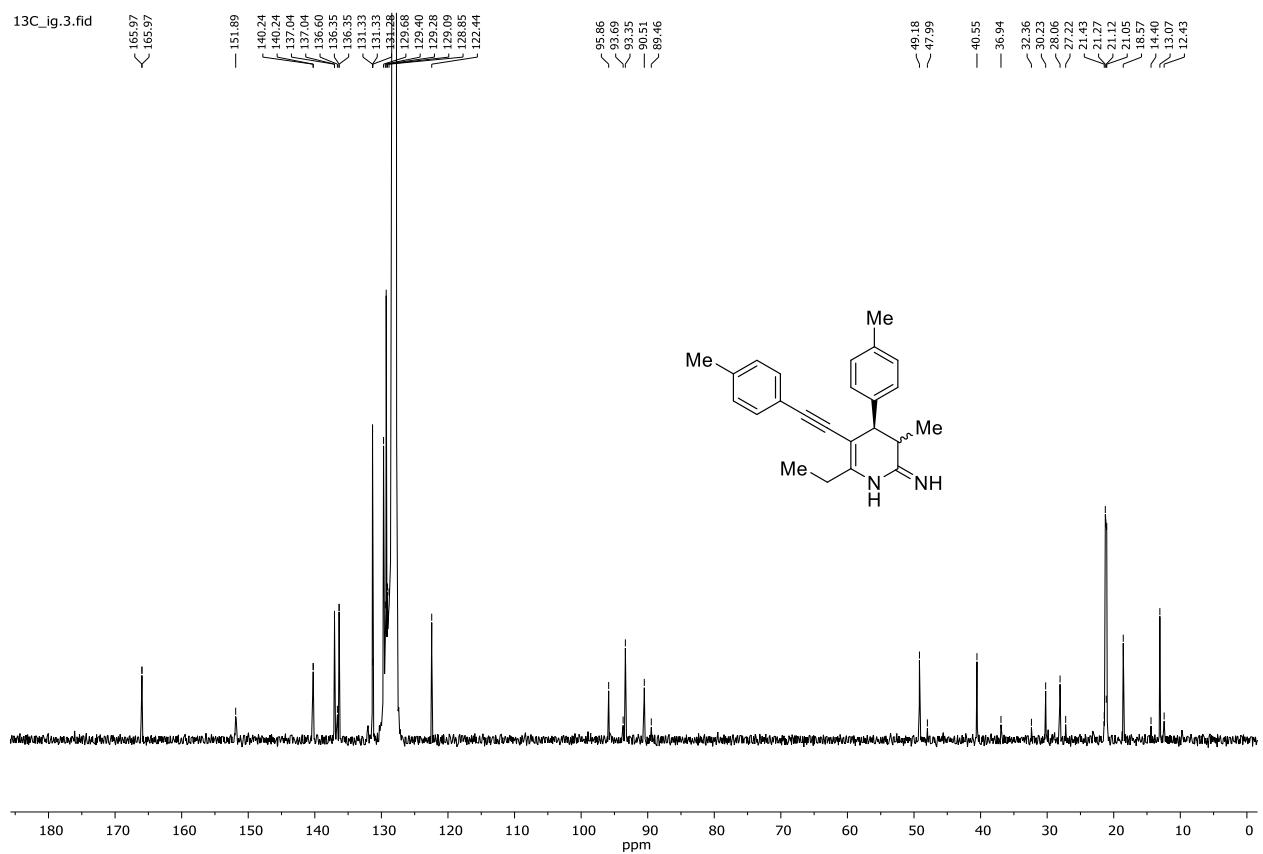
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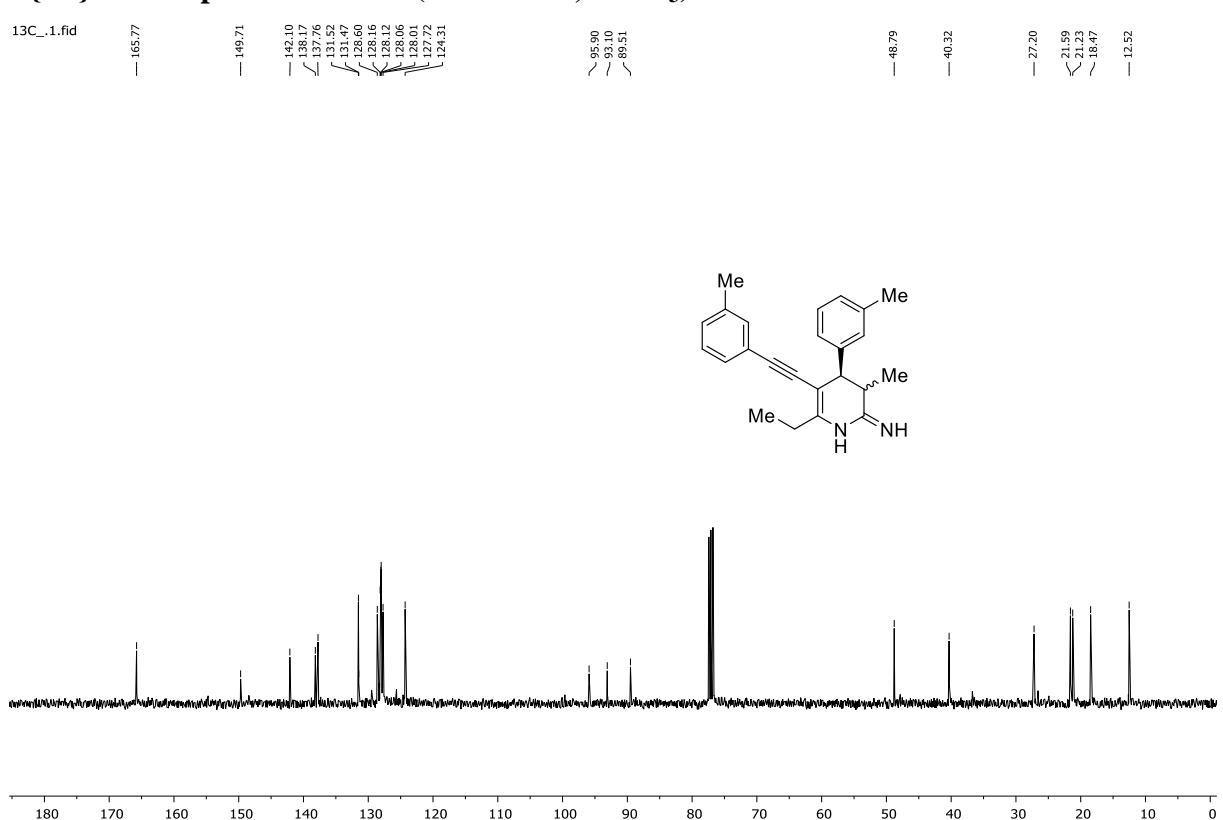
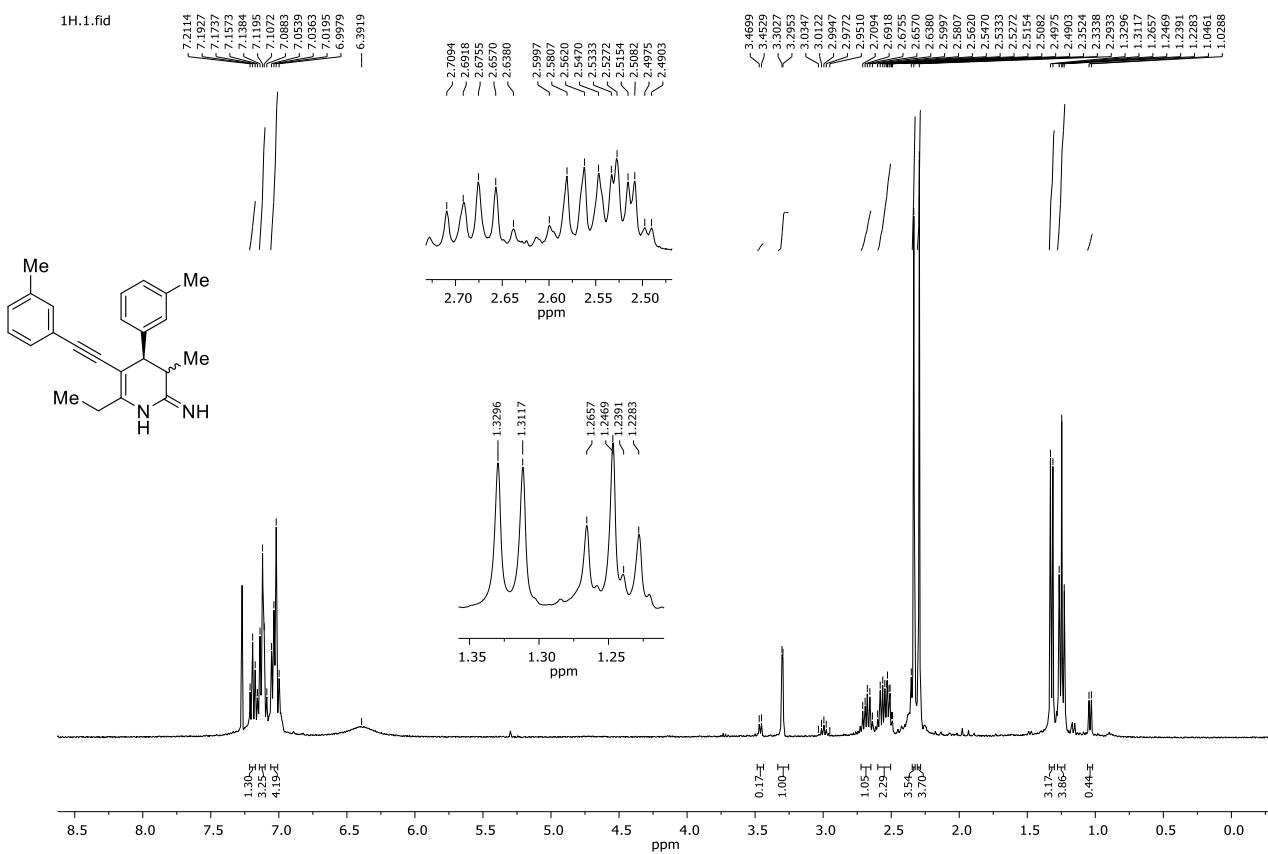
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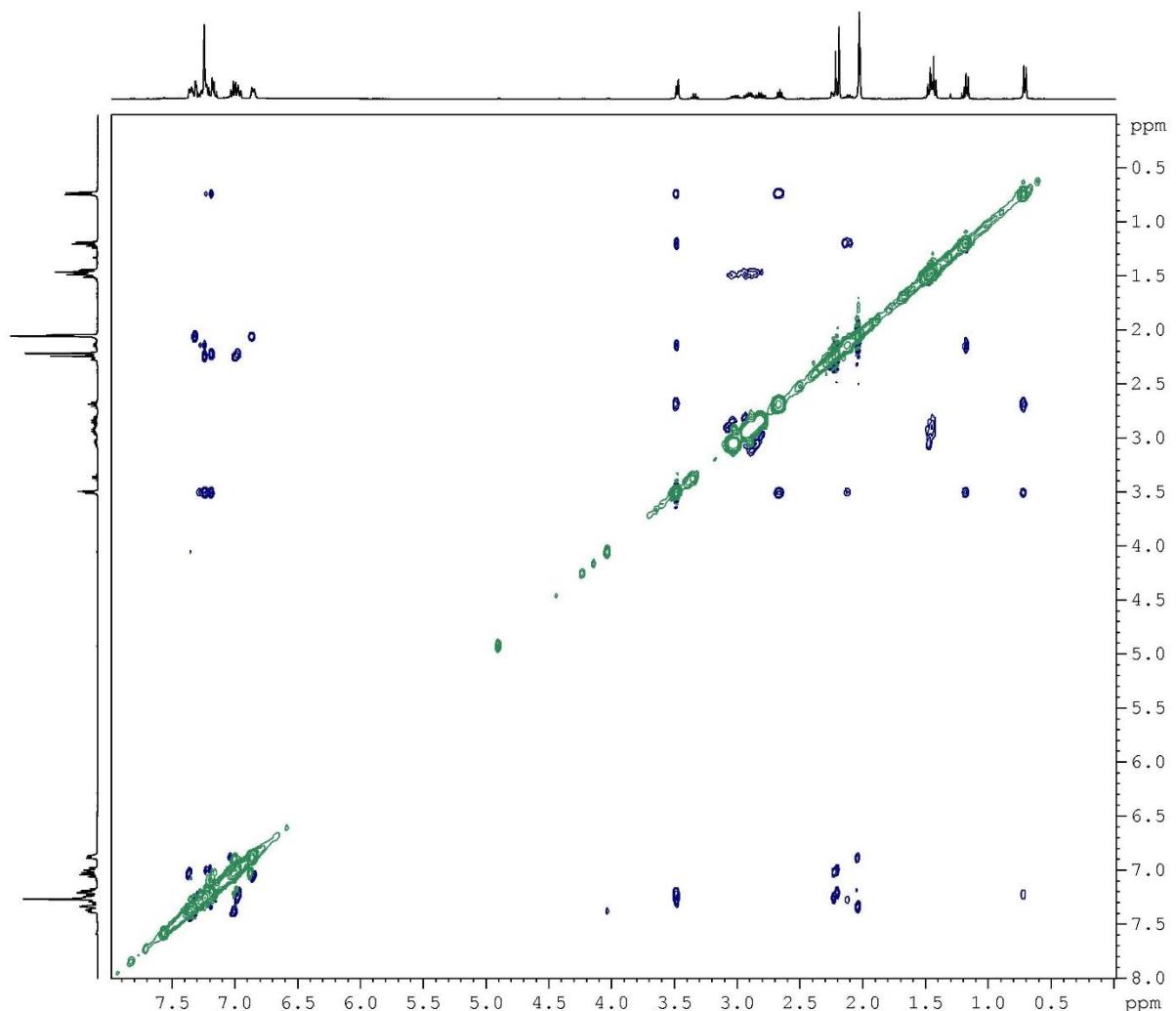
¹³C{¹H} NMR Spectrum of 3bb (100.6 MHz, C₆D₆)



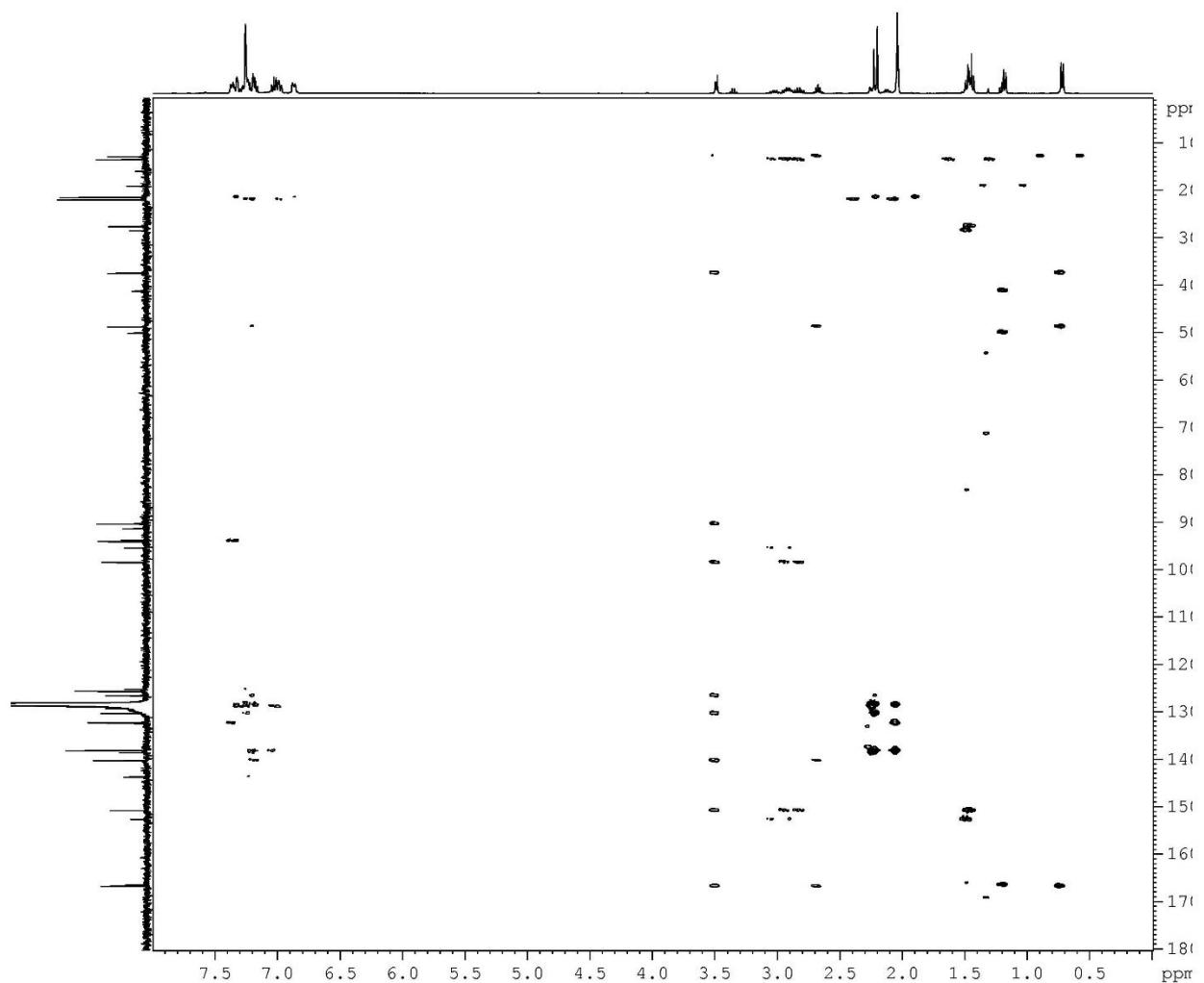
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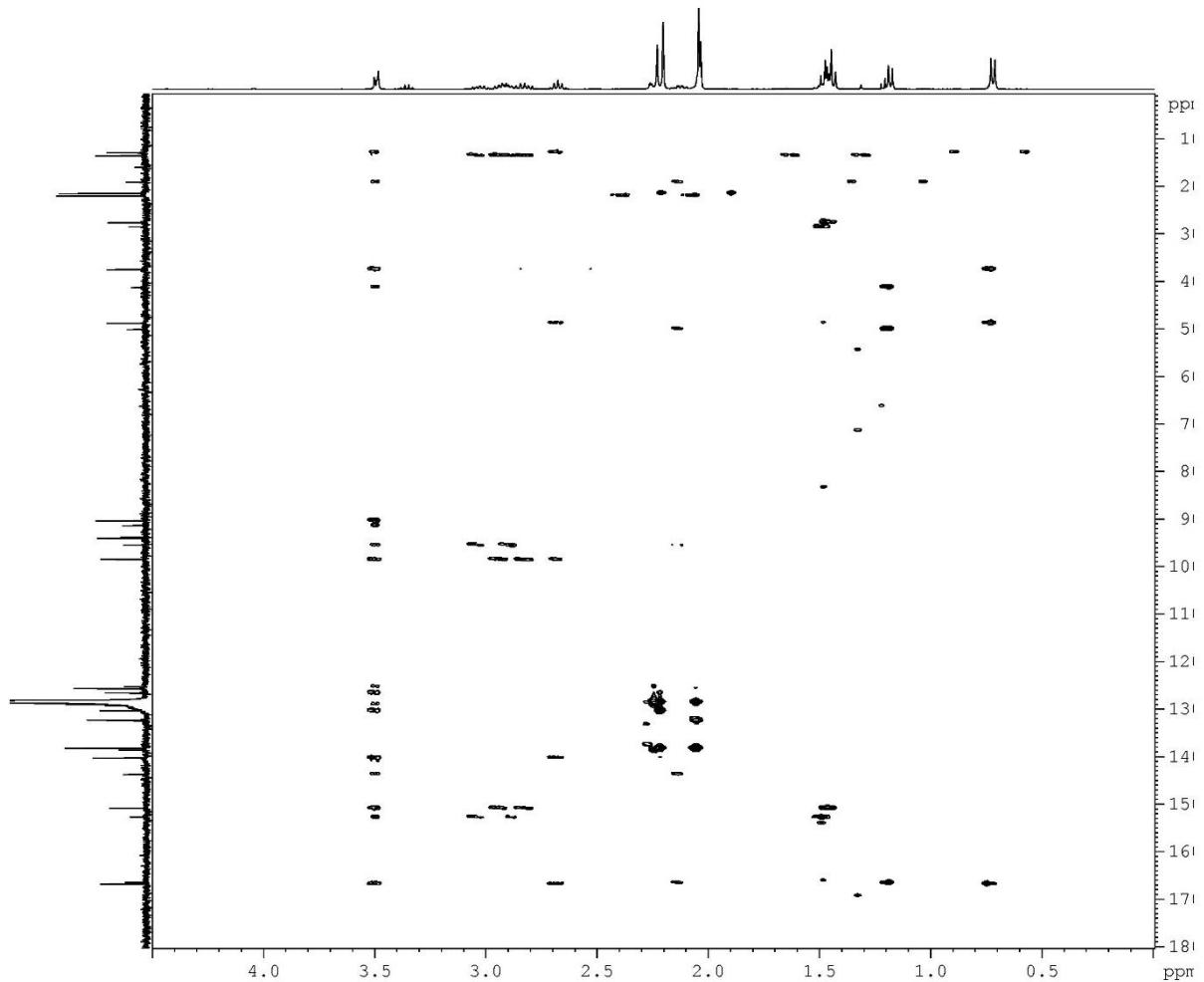
2D NOESY spectrum of 3cb (mixture of $3S^*,4R^*/3R^*,4R^*$ -diastereomers) (C_6D_6)



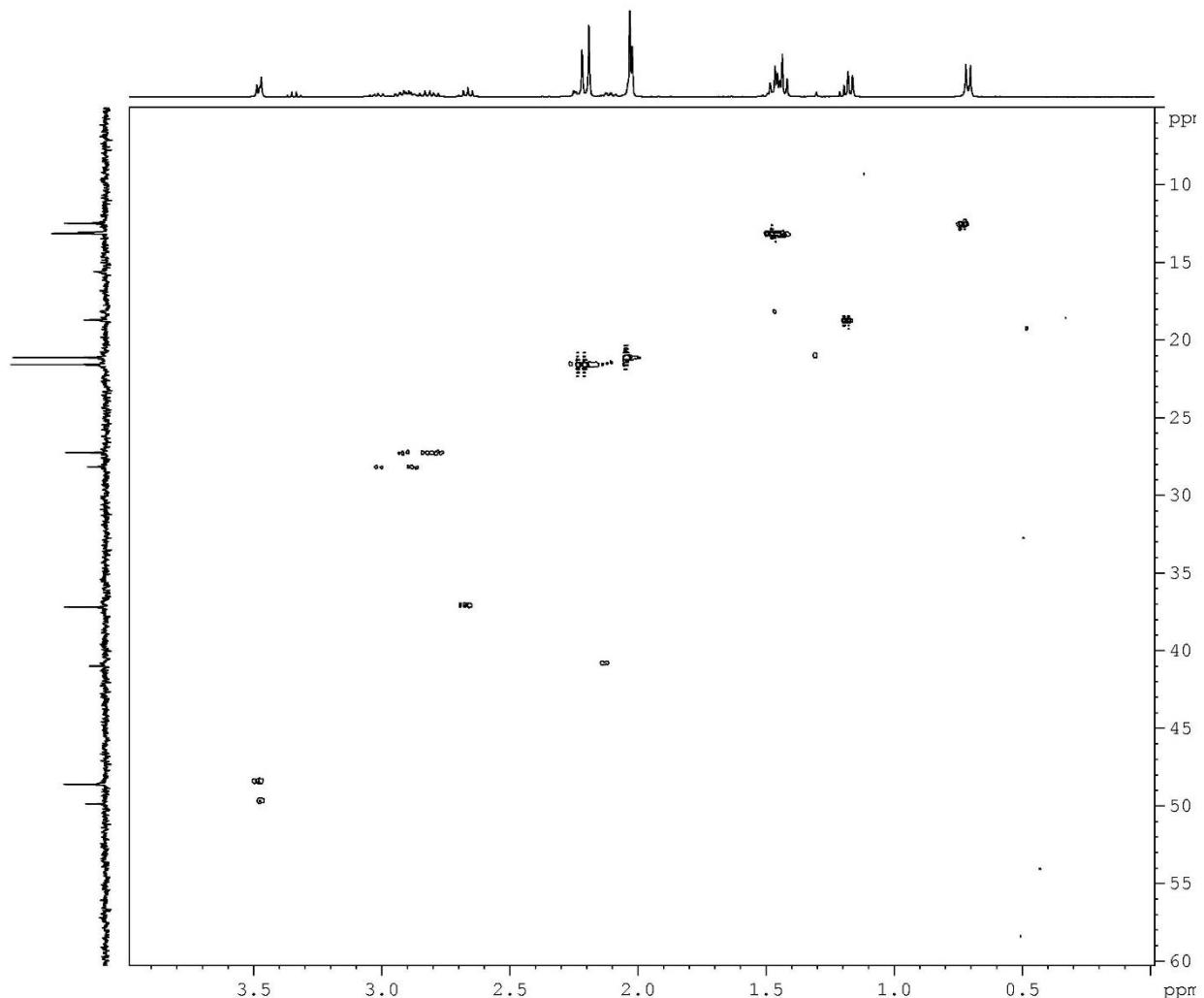
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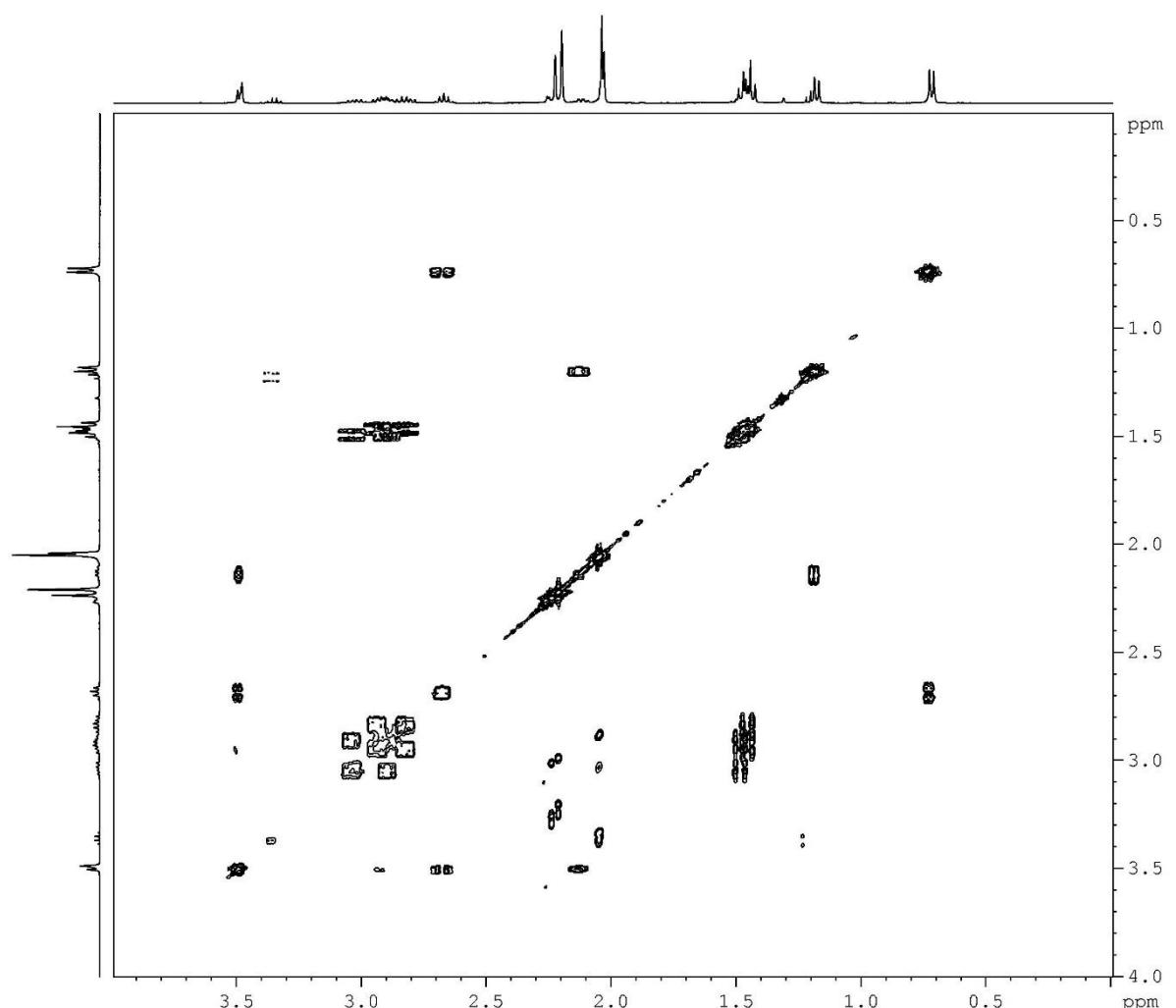
2D ^1H - ^{13}C HMBC spectrum of 3cb (mixture of $3S^*,4R^*/3R^*,4R^*$ -diastereomers) aliphatic region (C_6D_6)



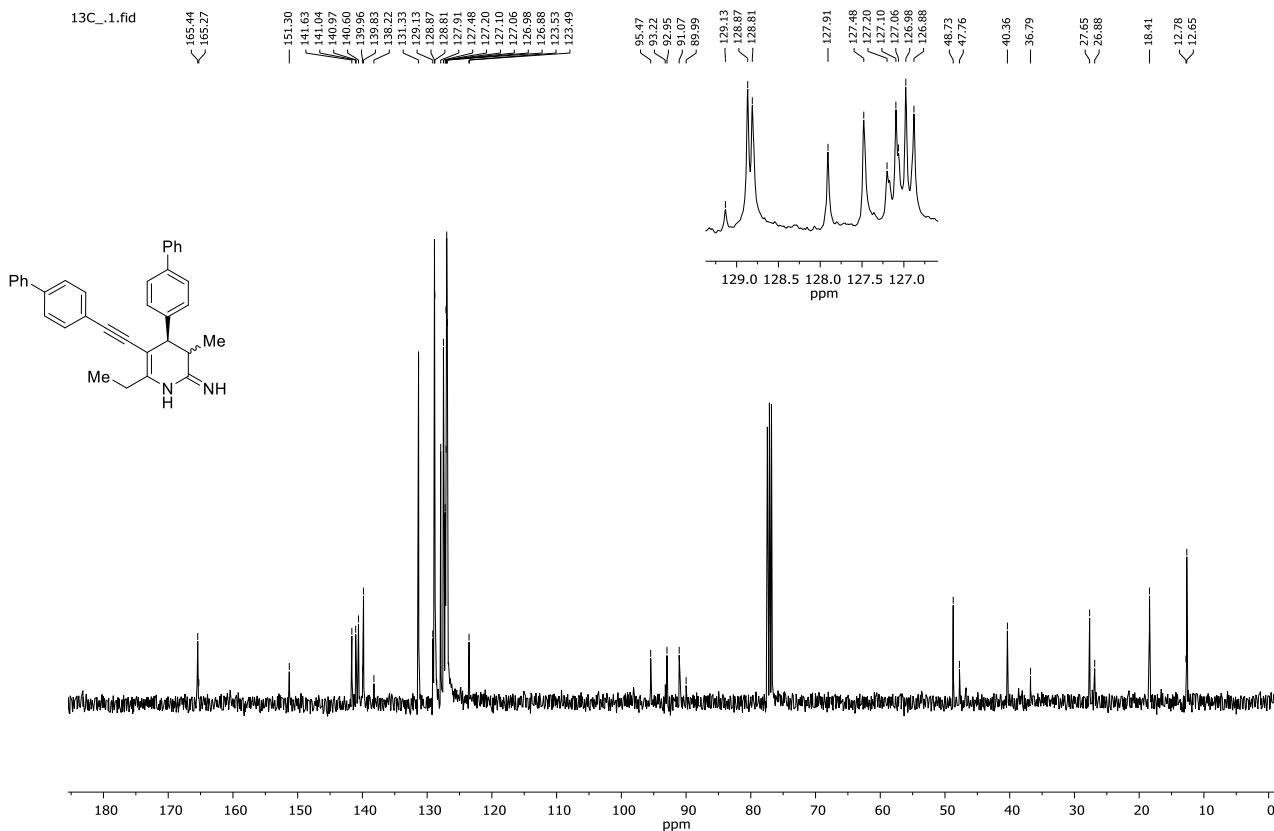
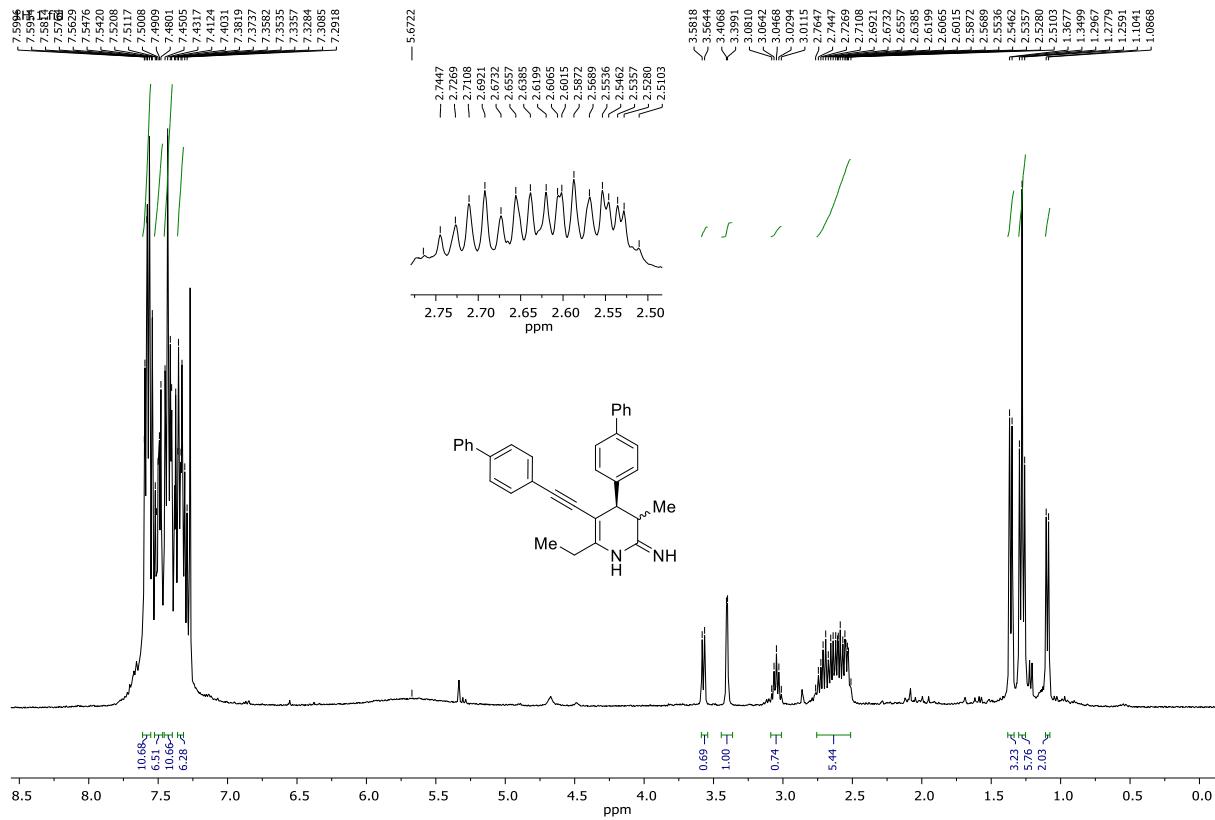
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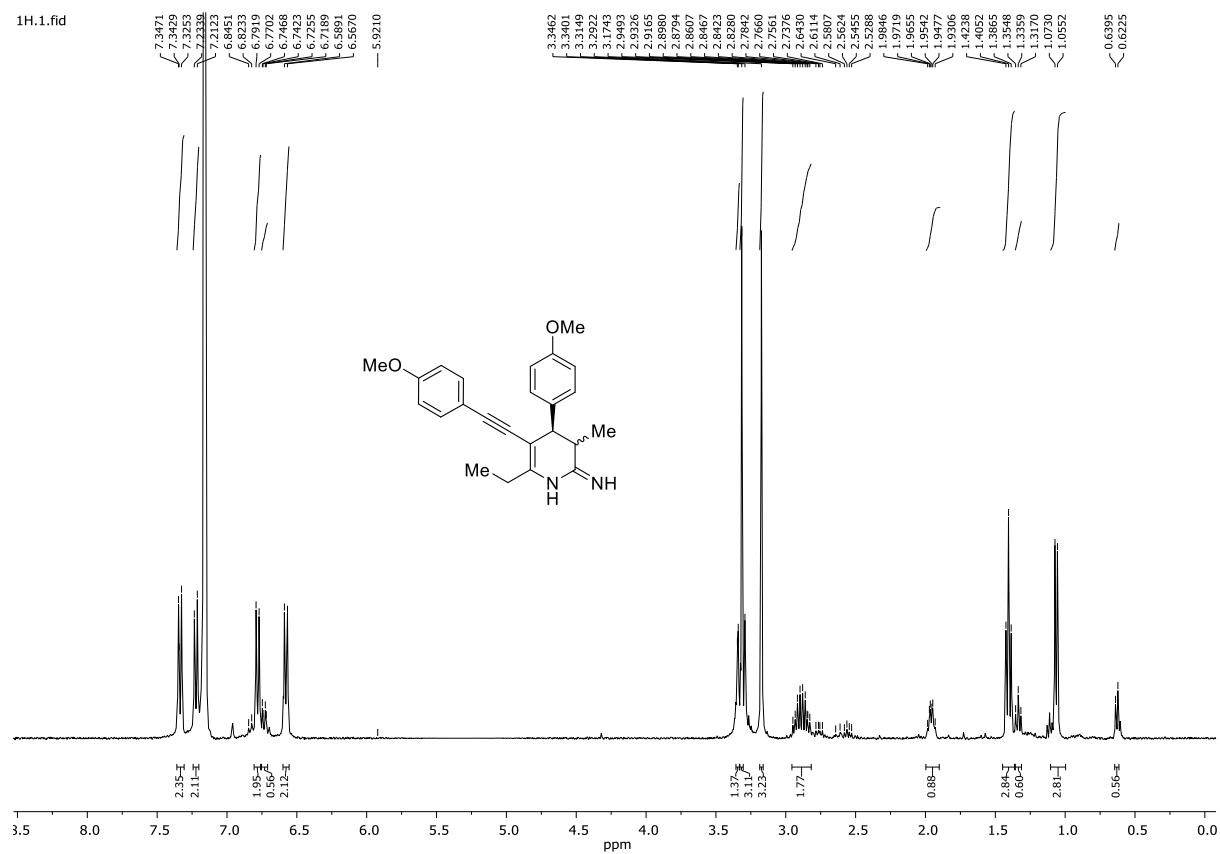
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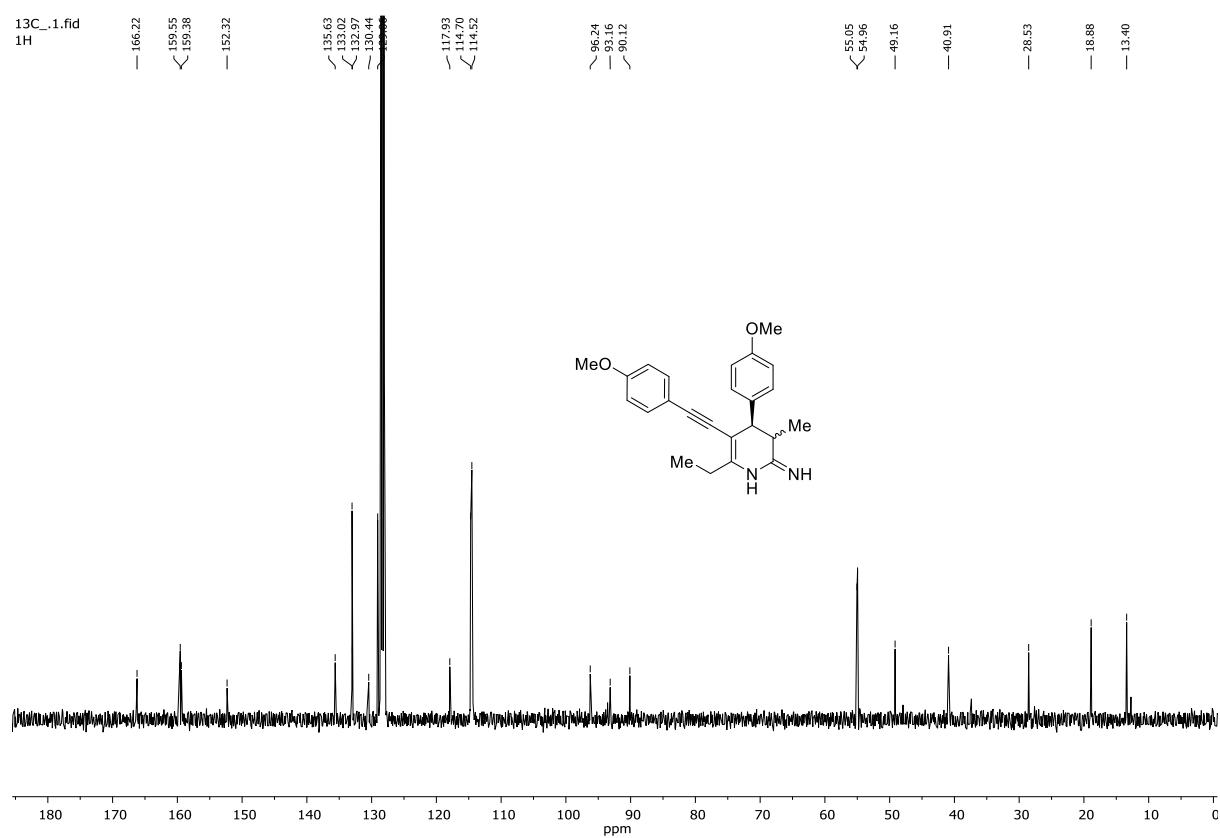
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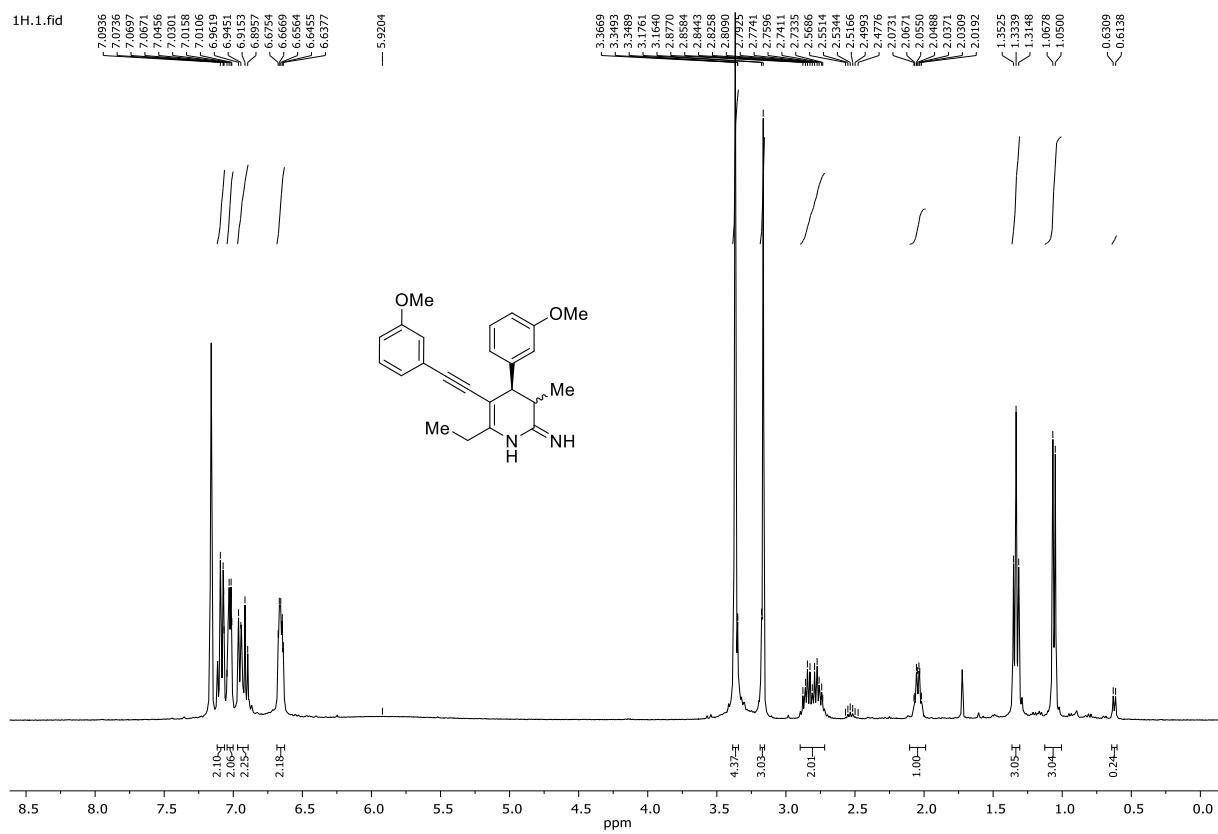
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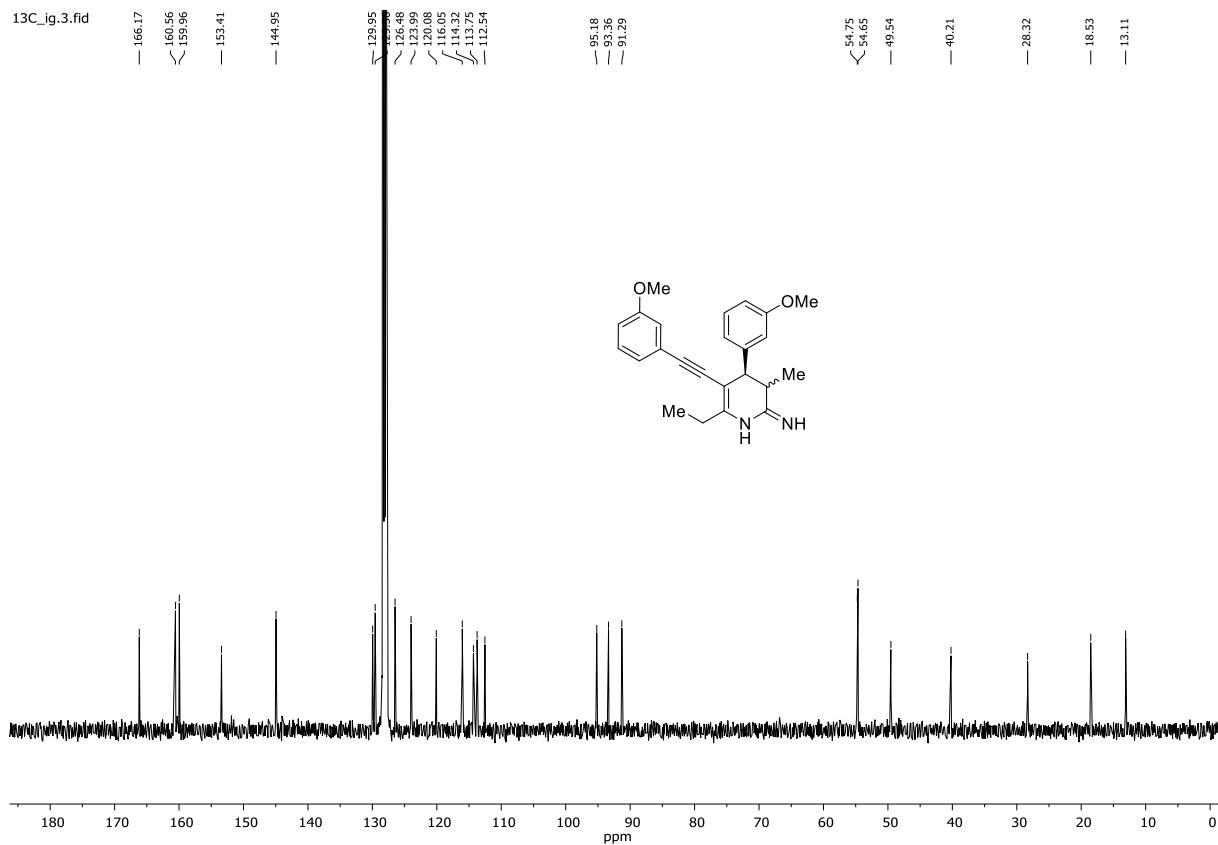
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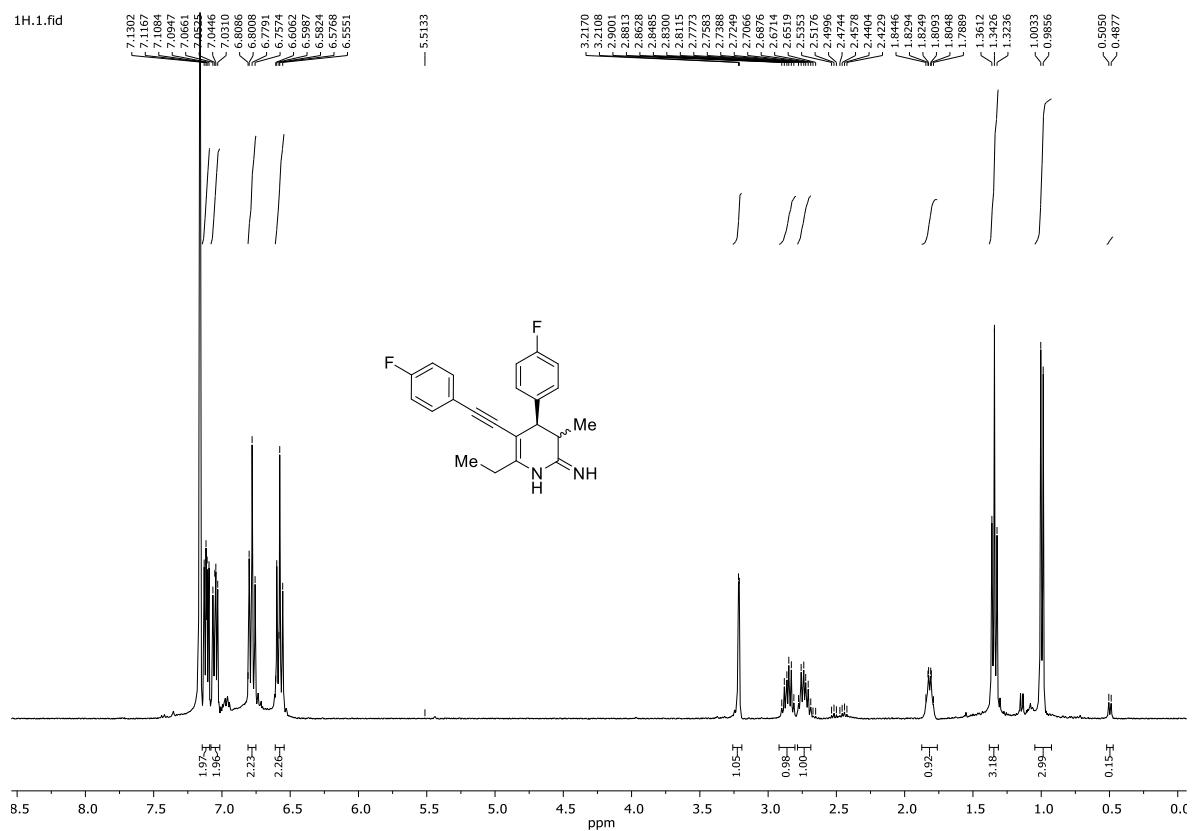
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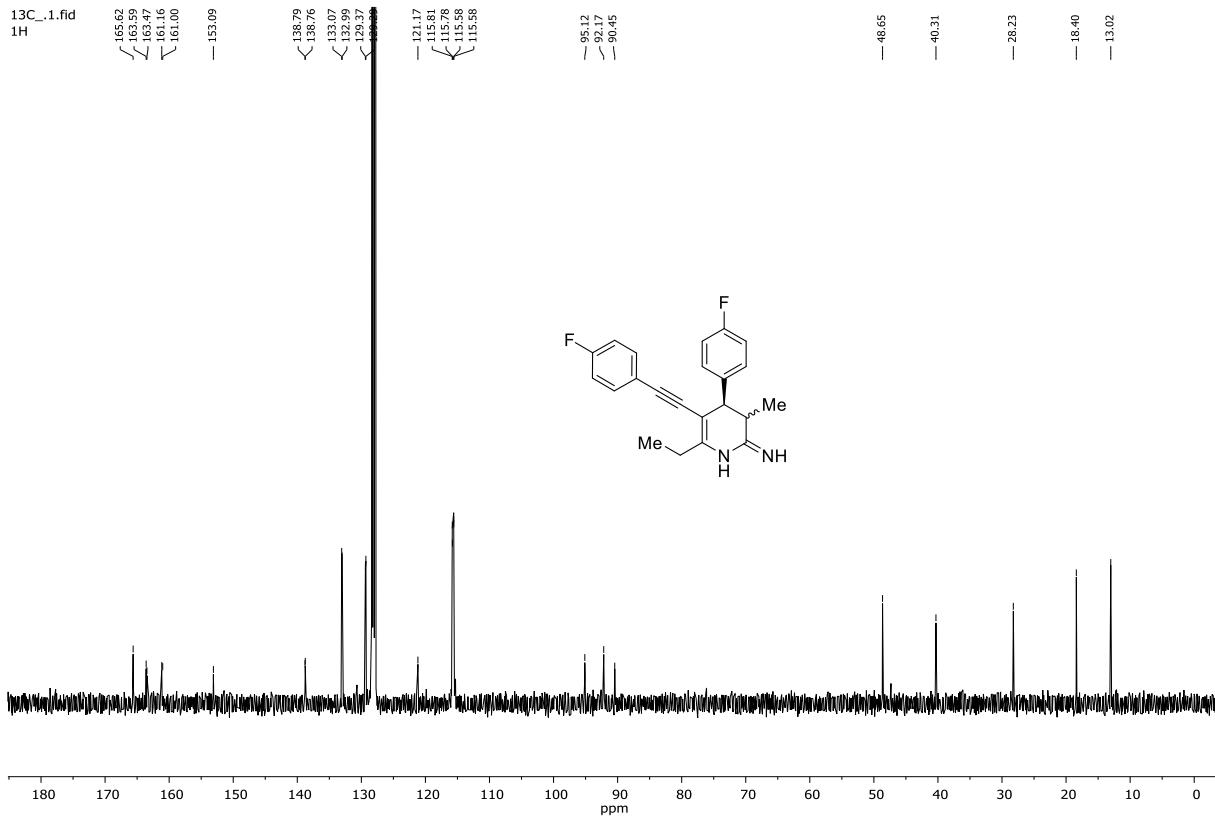
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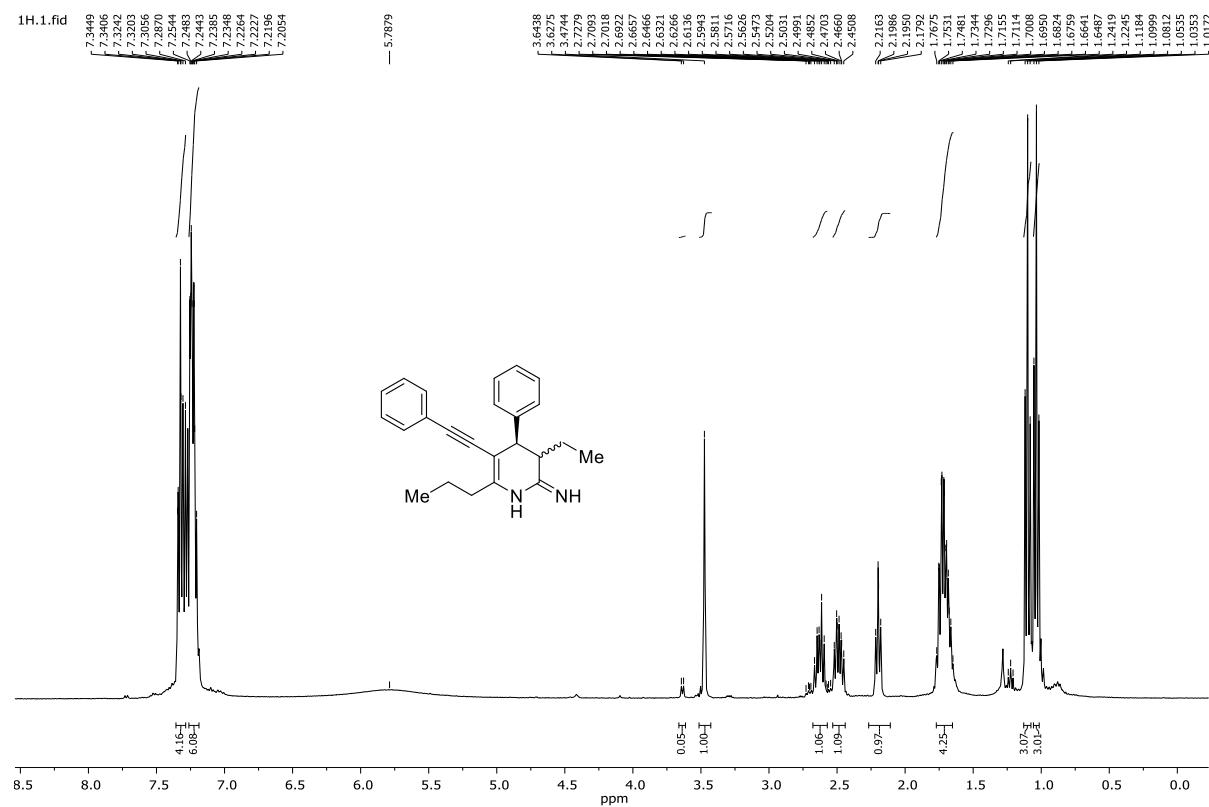
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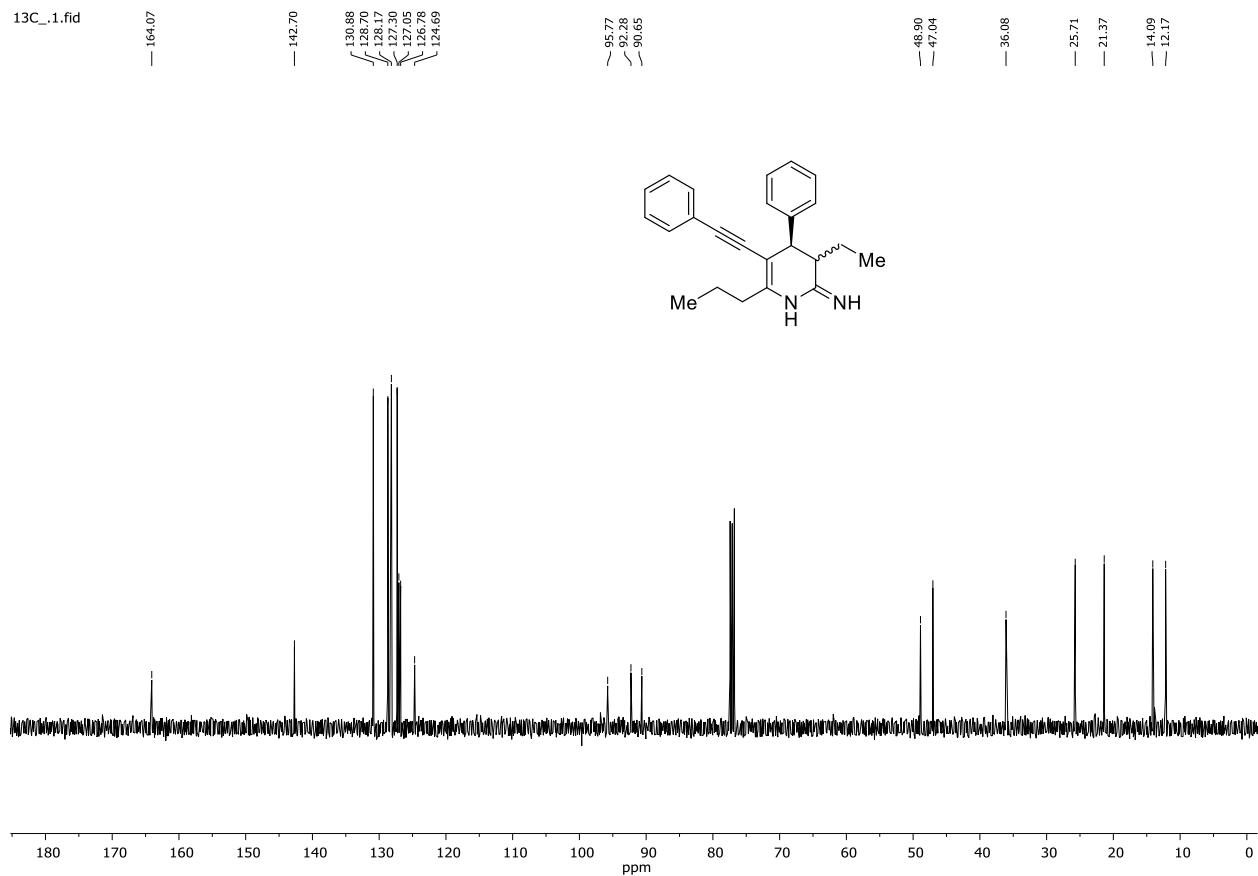
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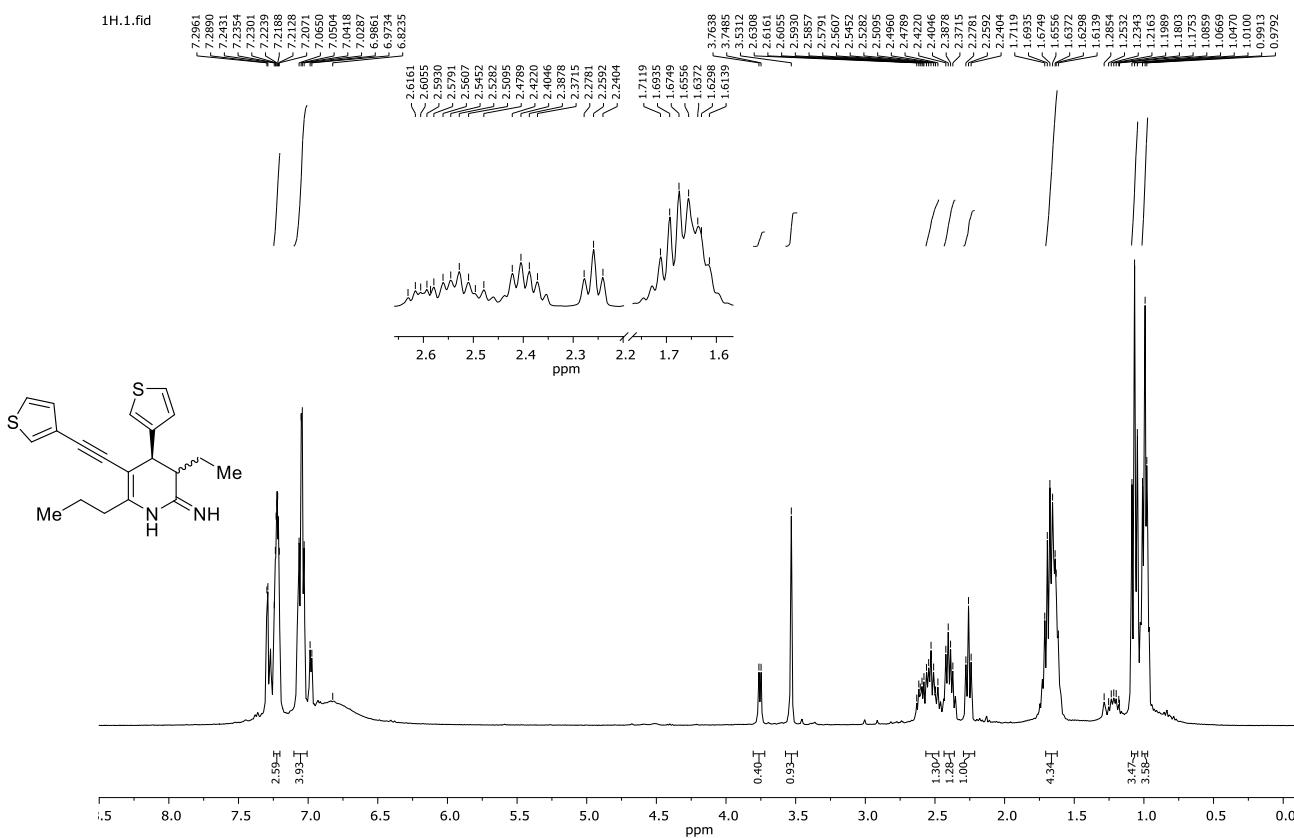
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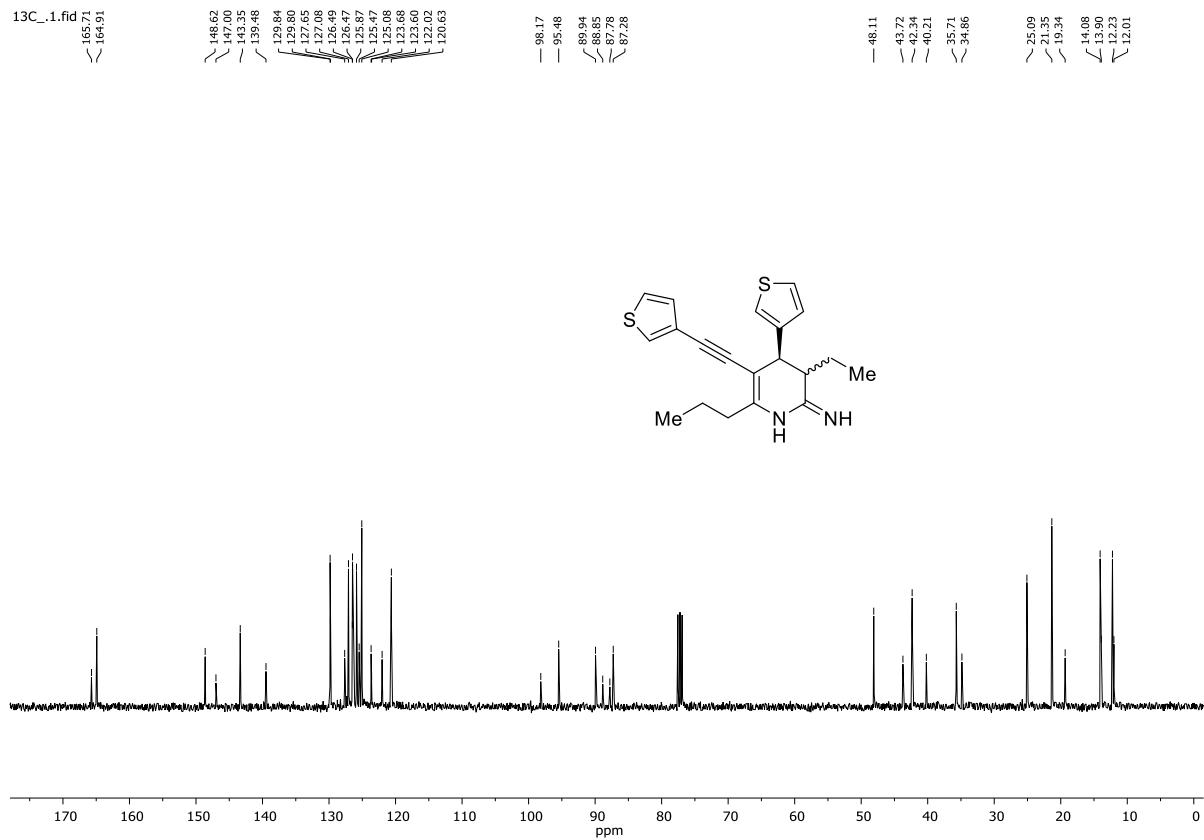
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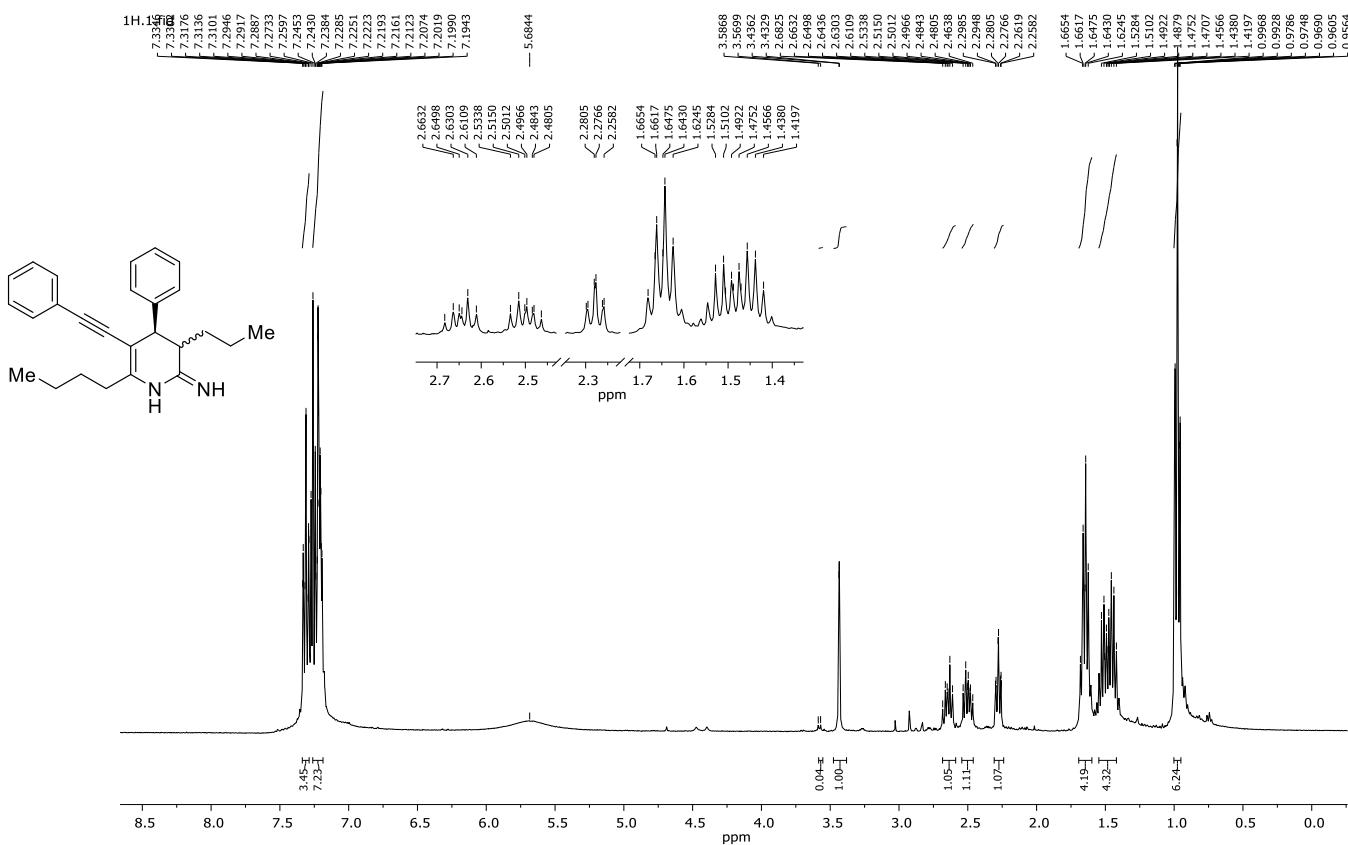
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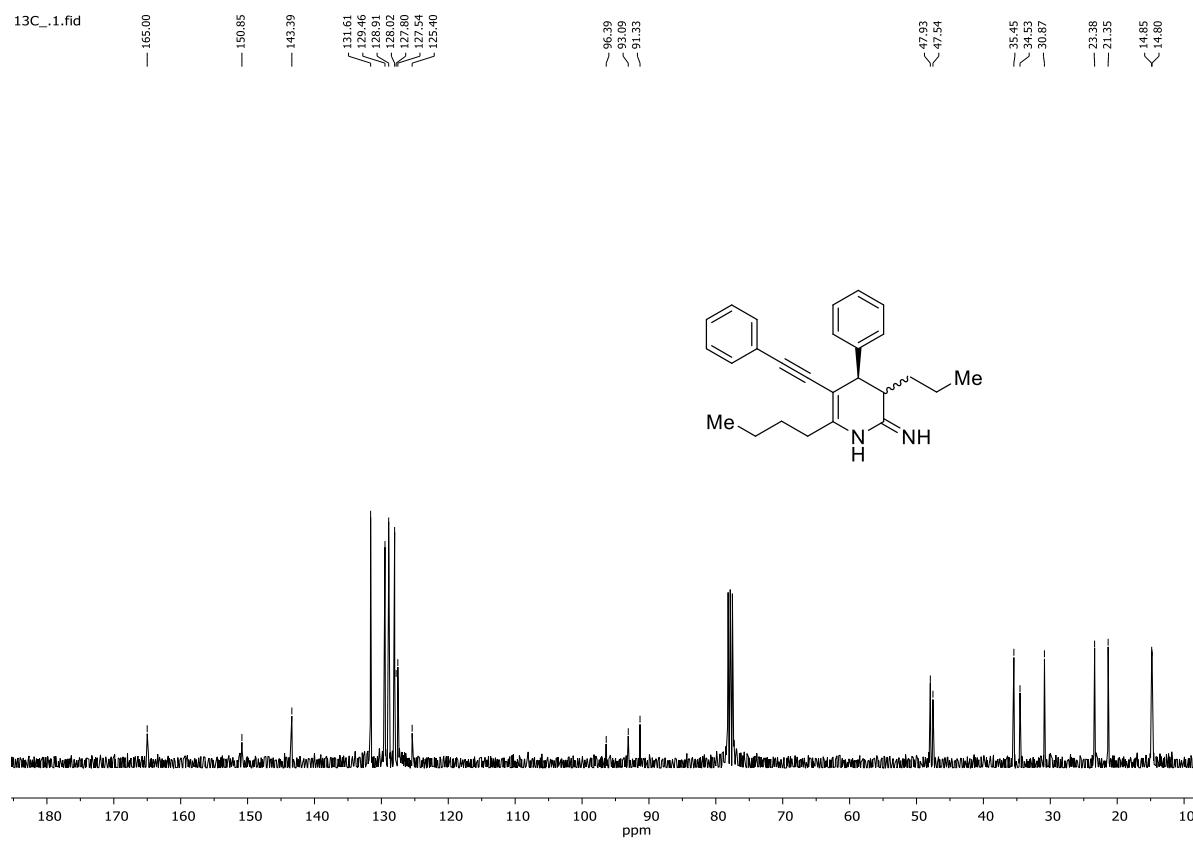
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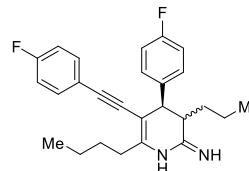
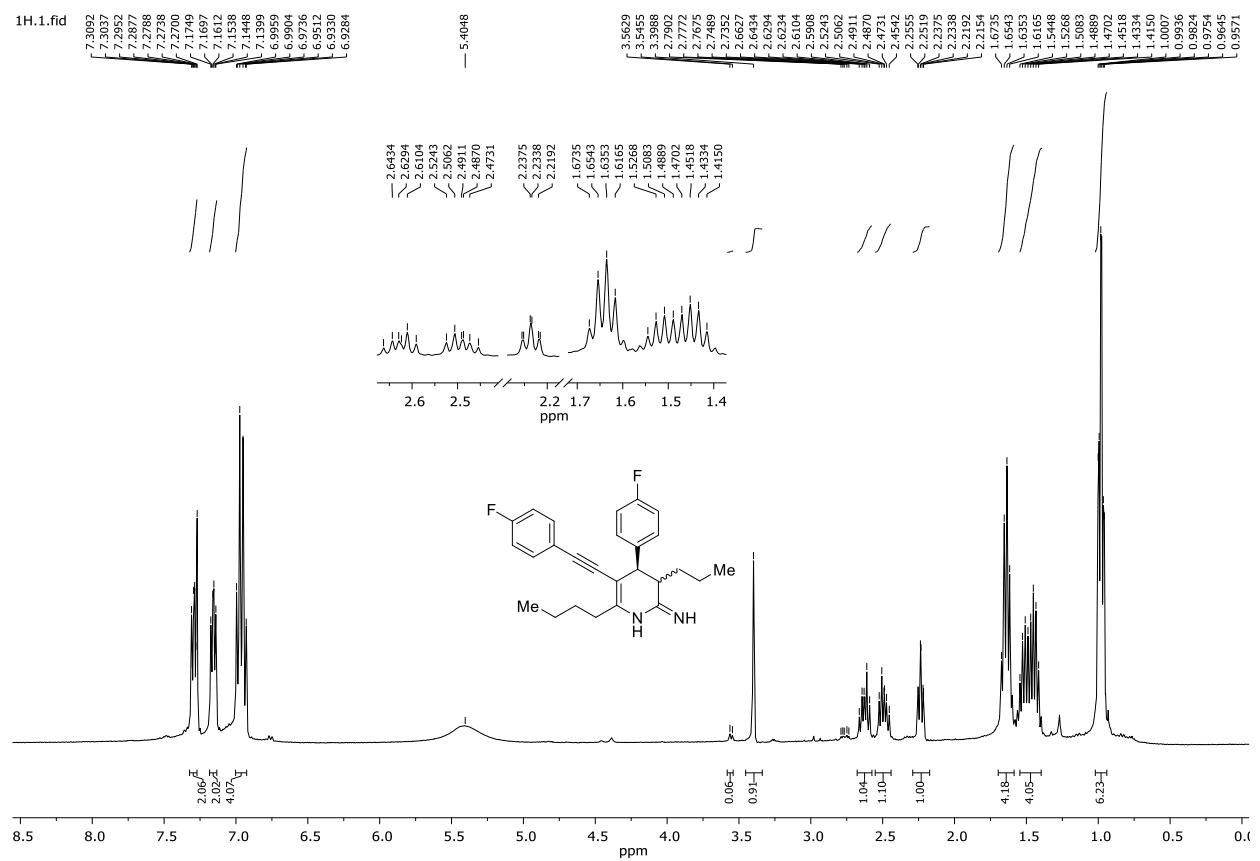
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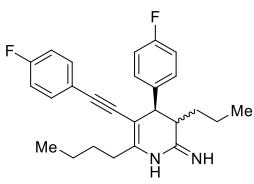
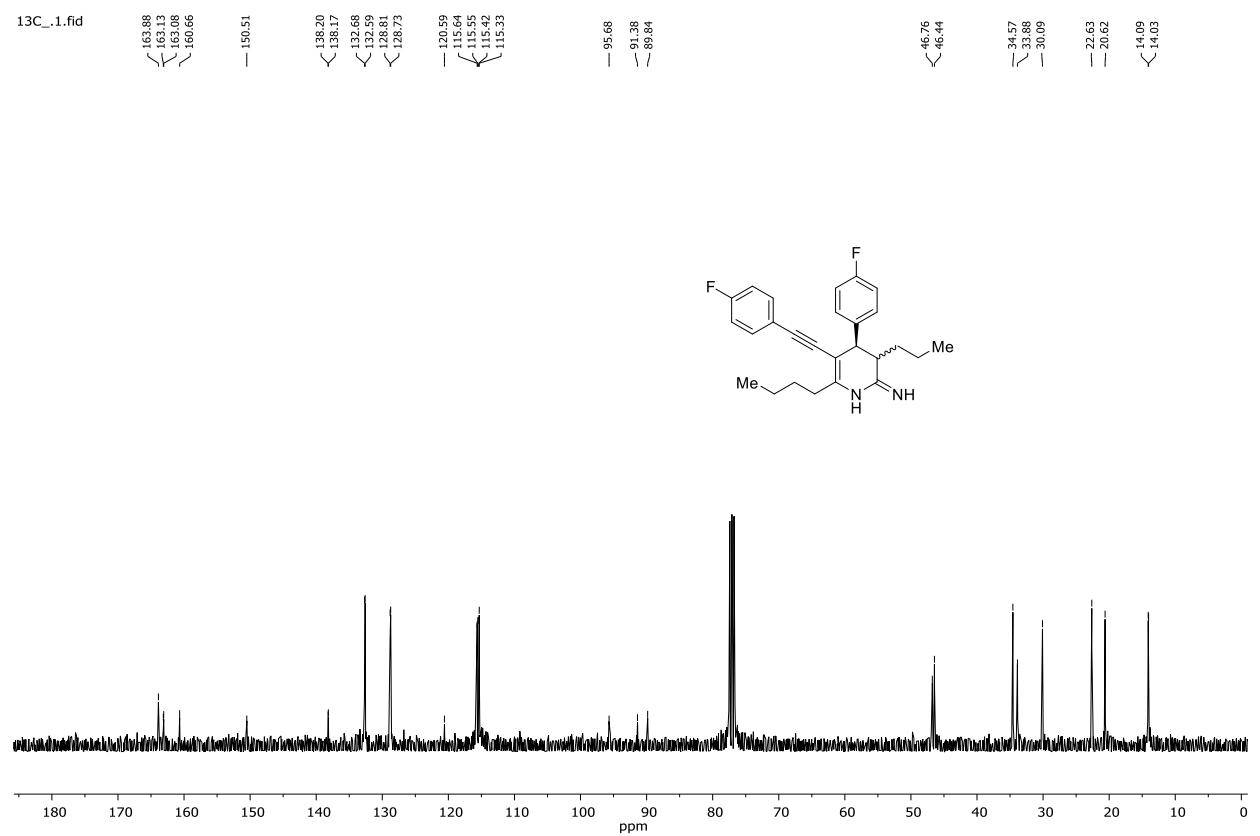
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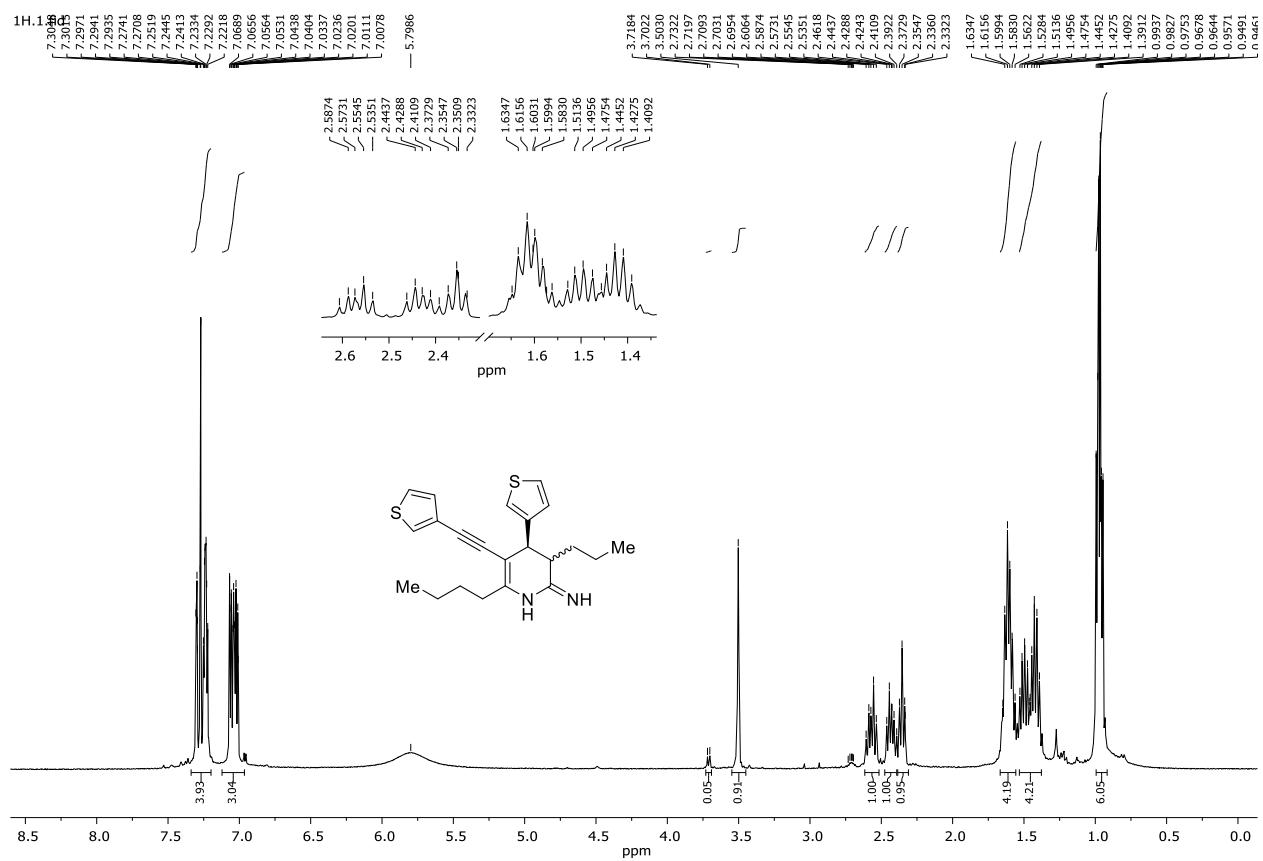
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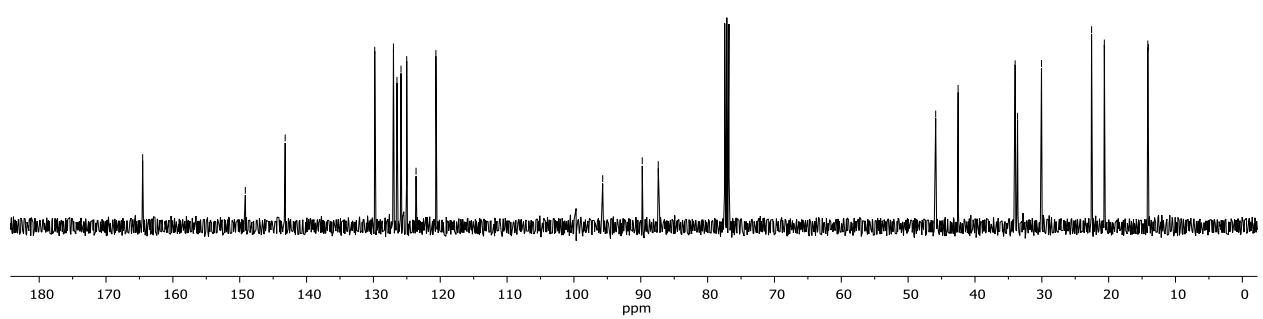
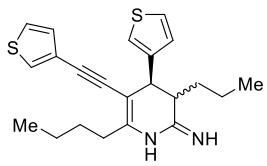
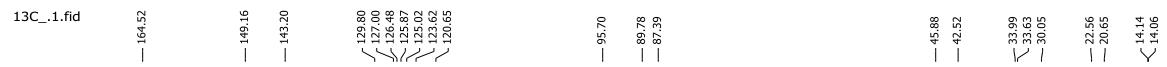
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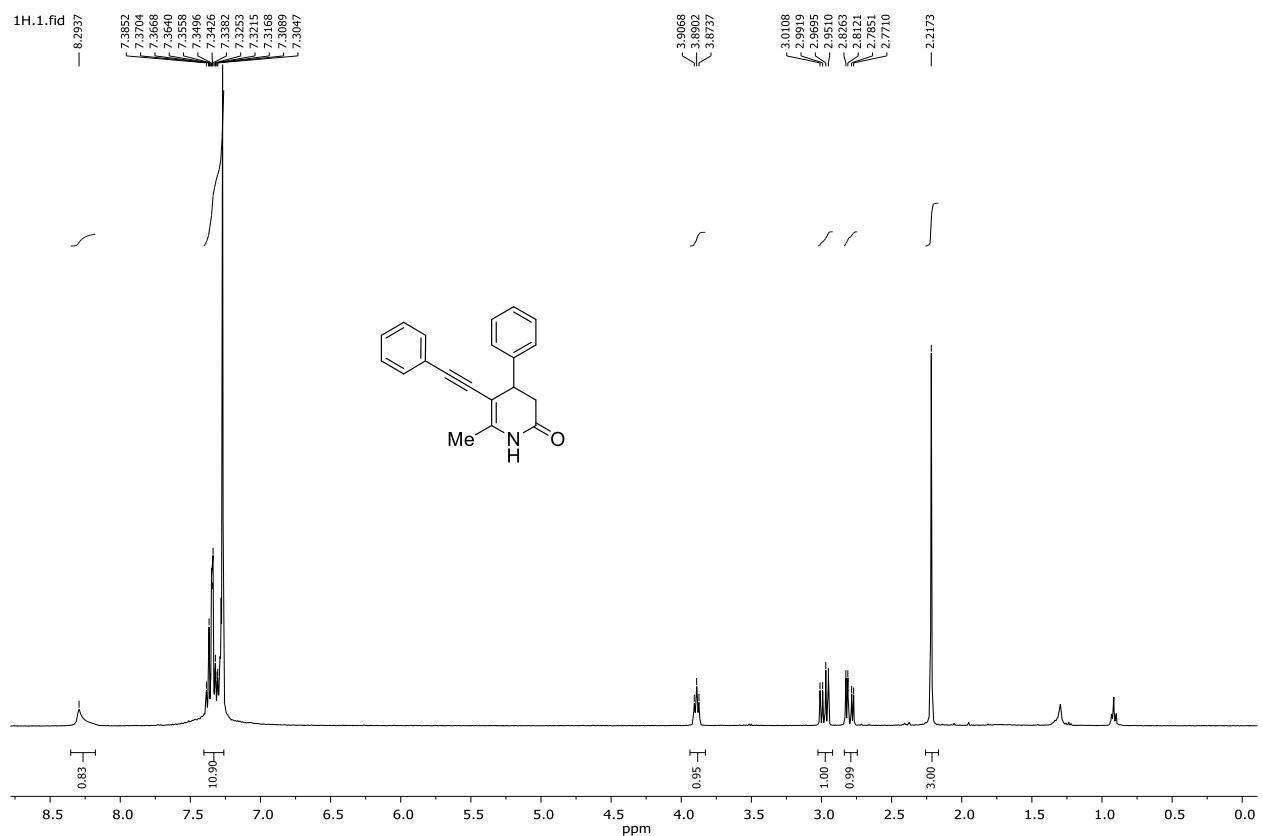
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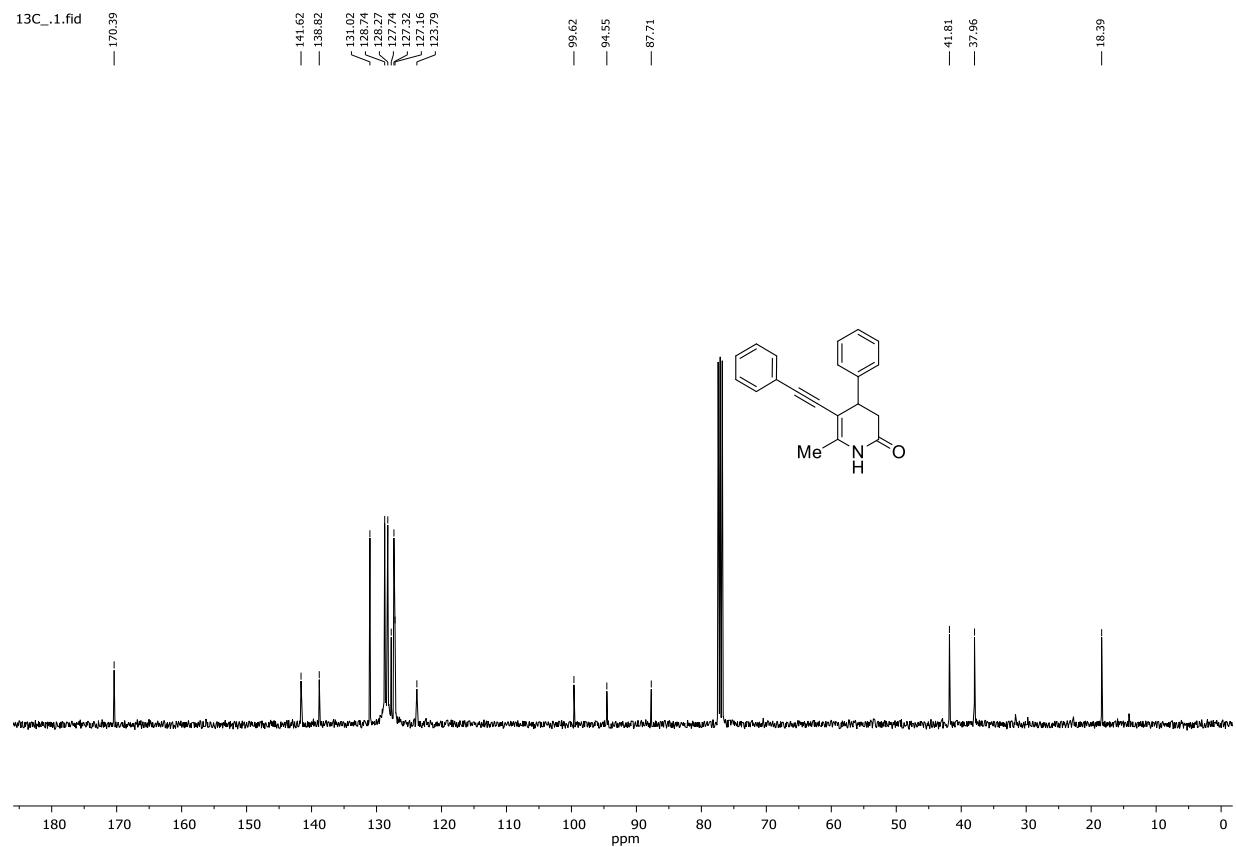
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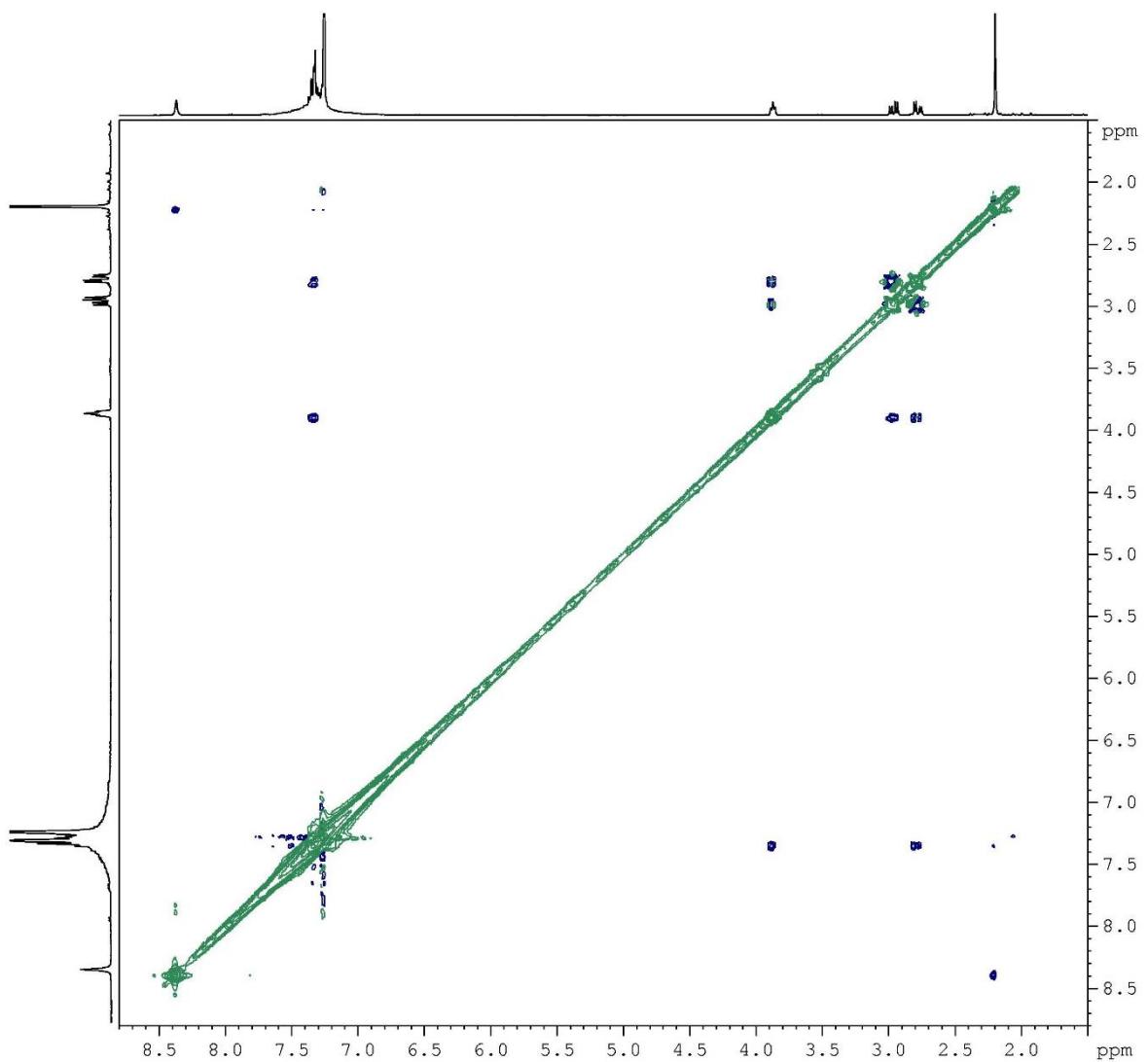
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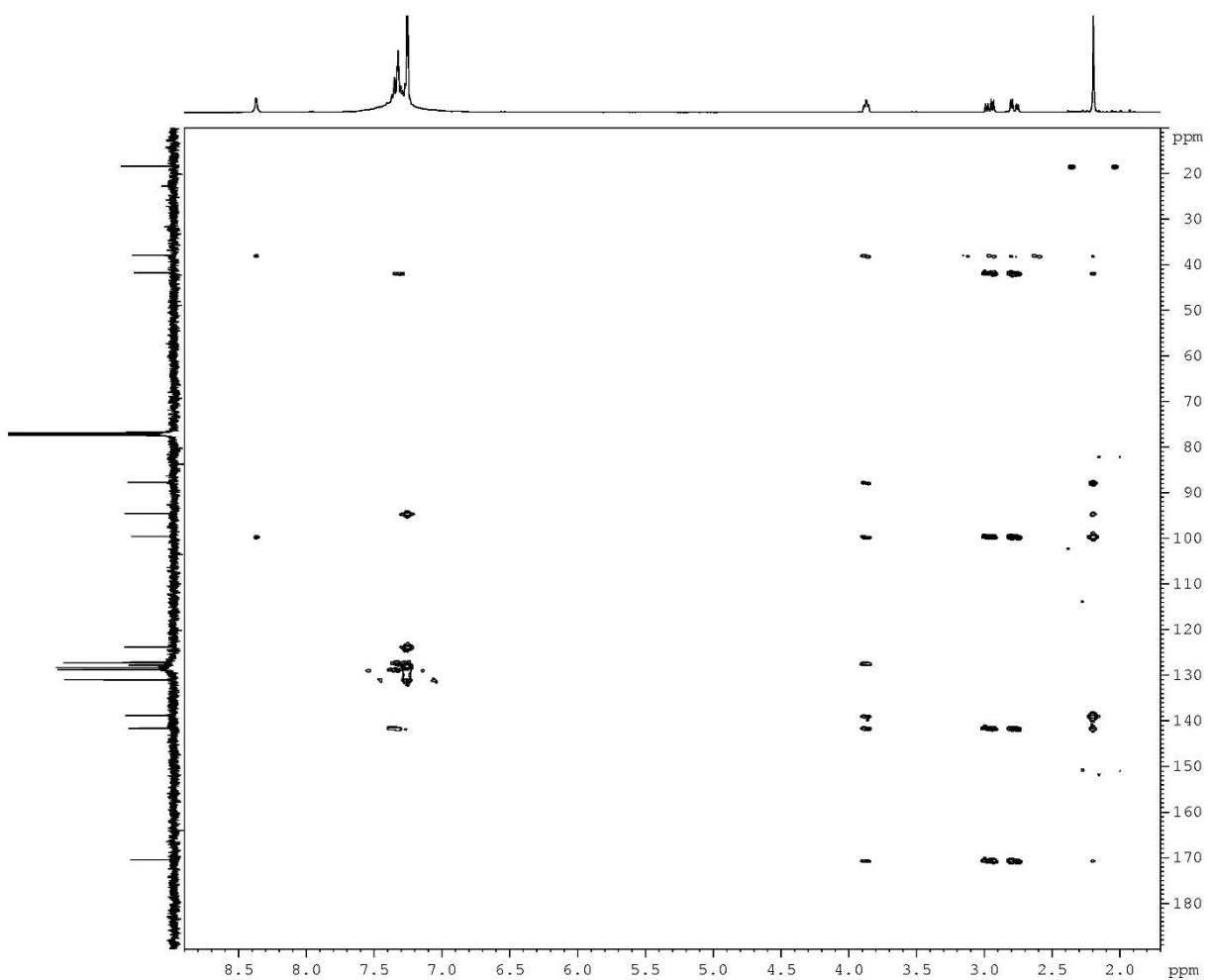
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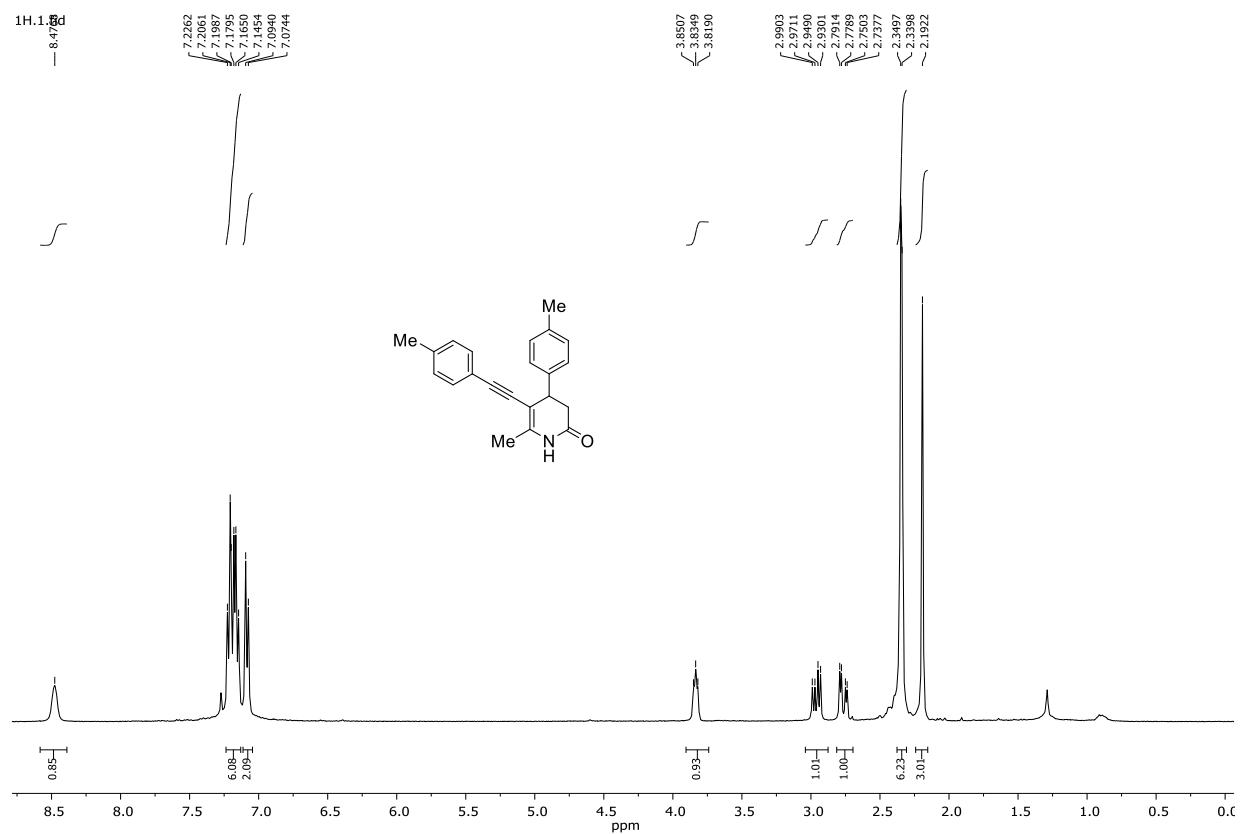
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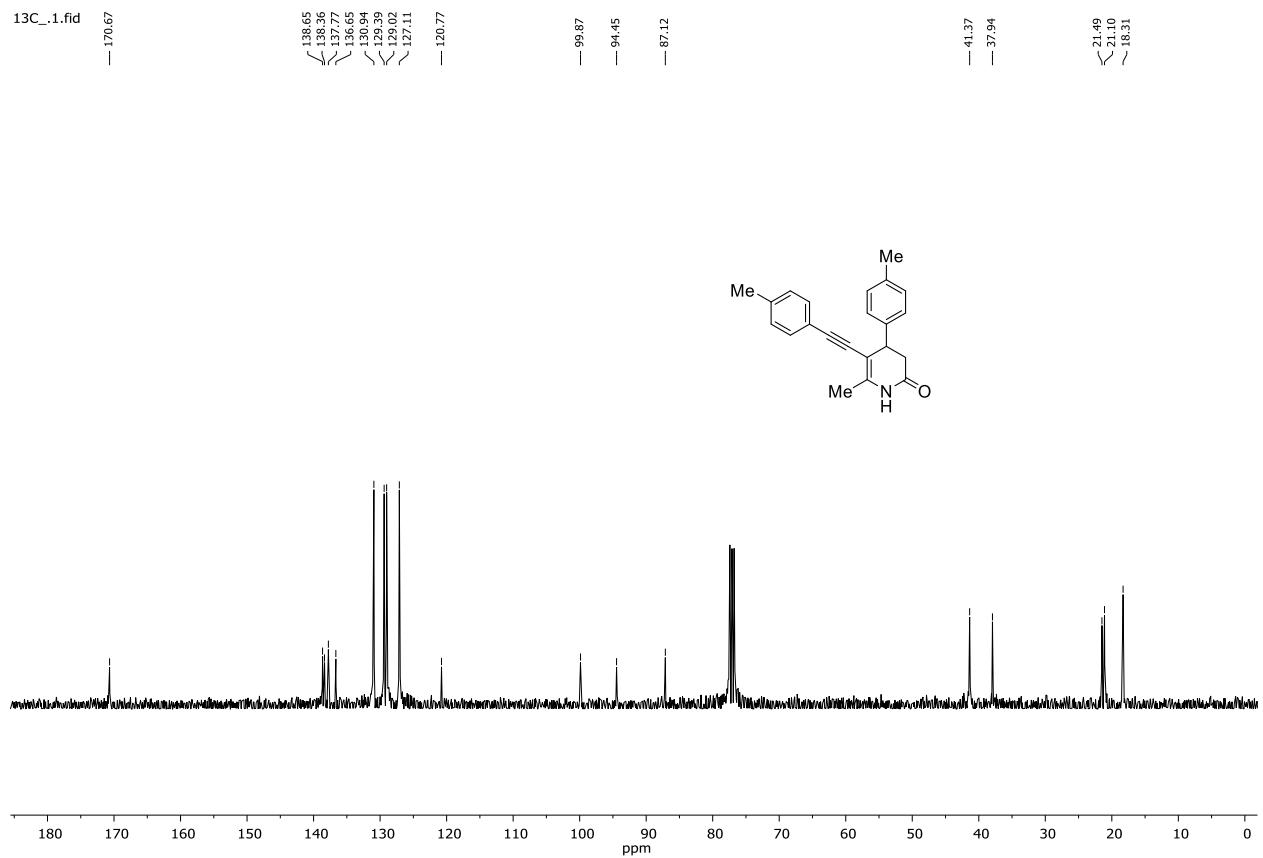
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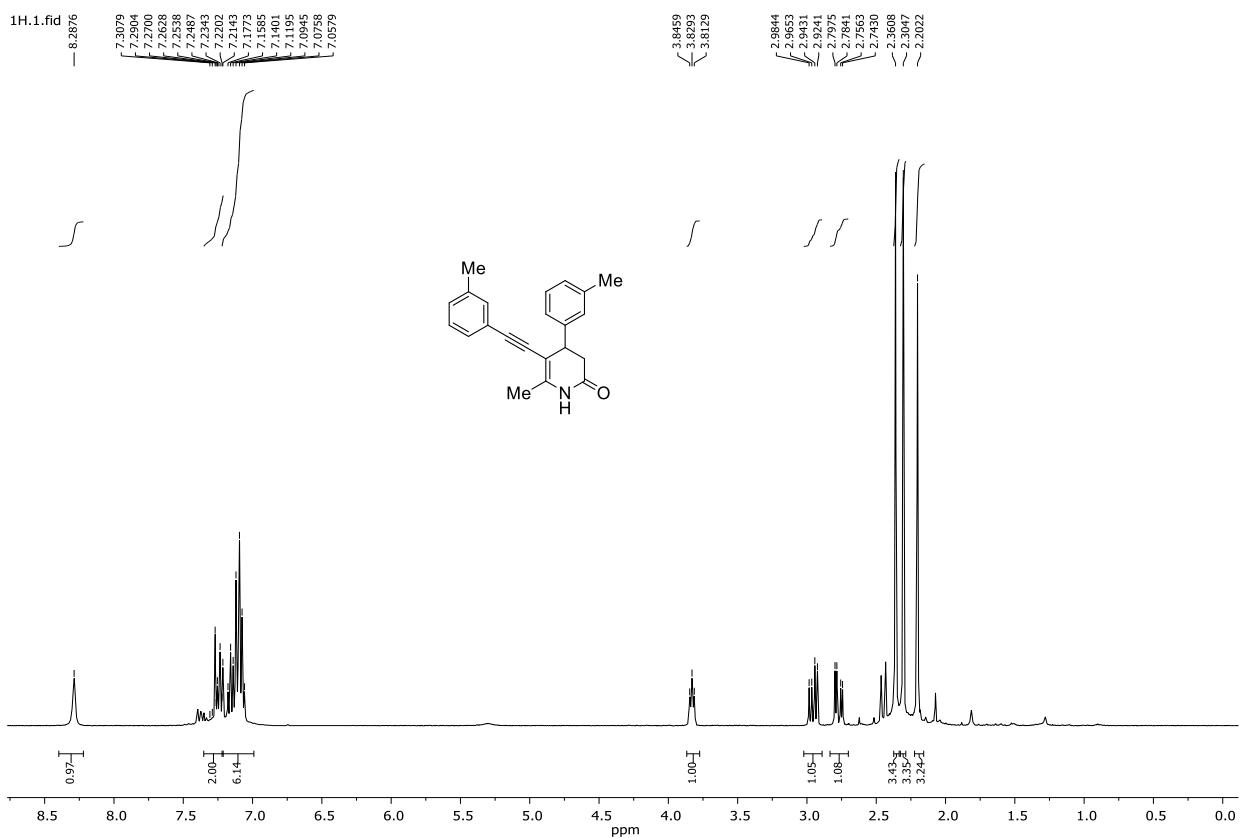
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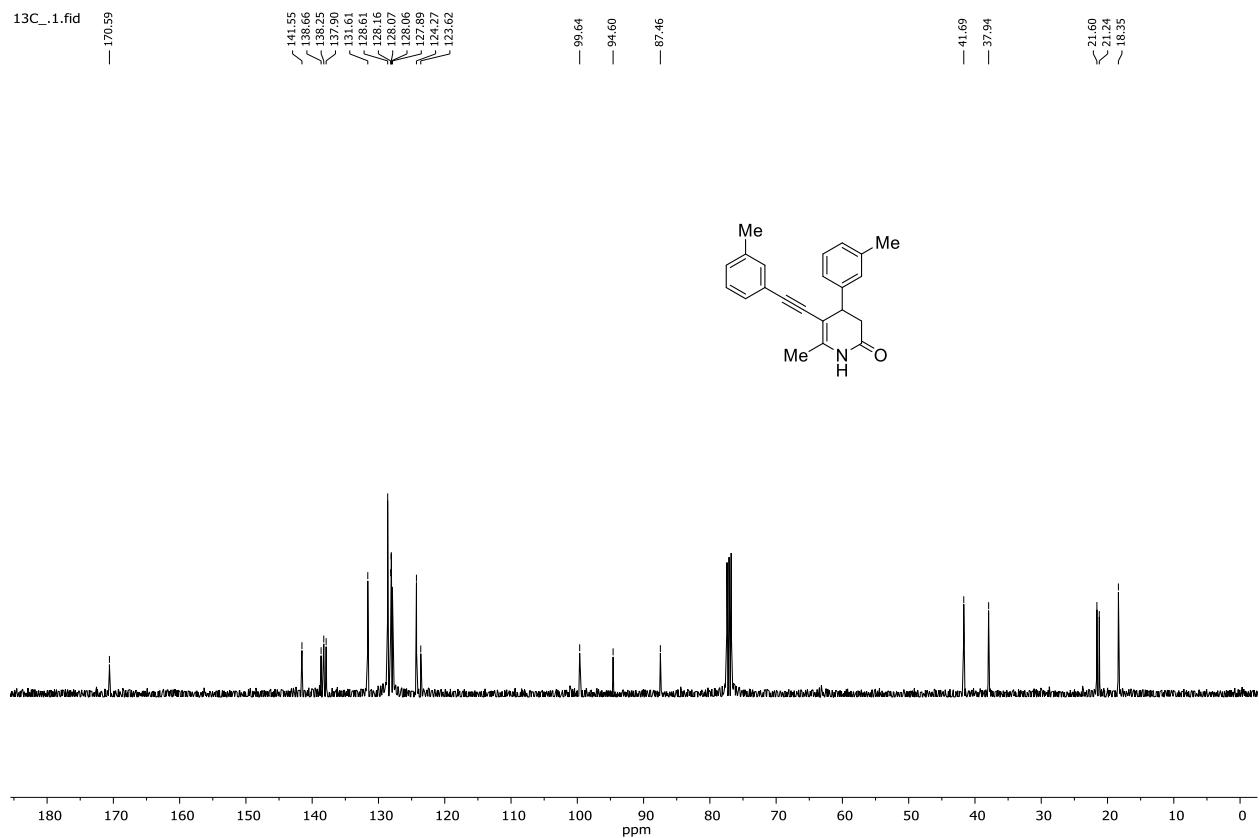
$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum of 4ba (100.6 MHz, CDCl_3)



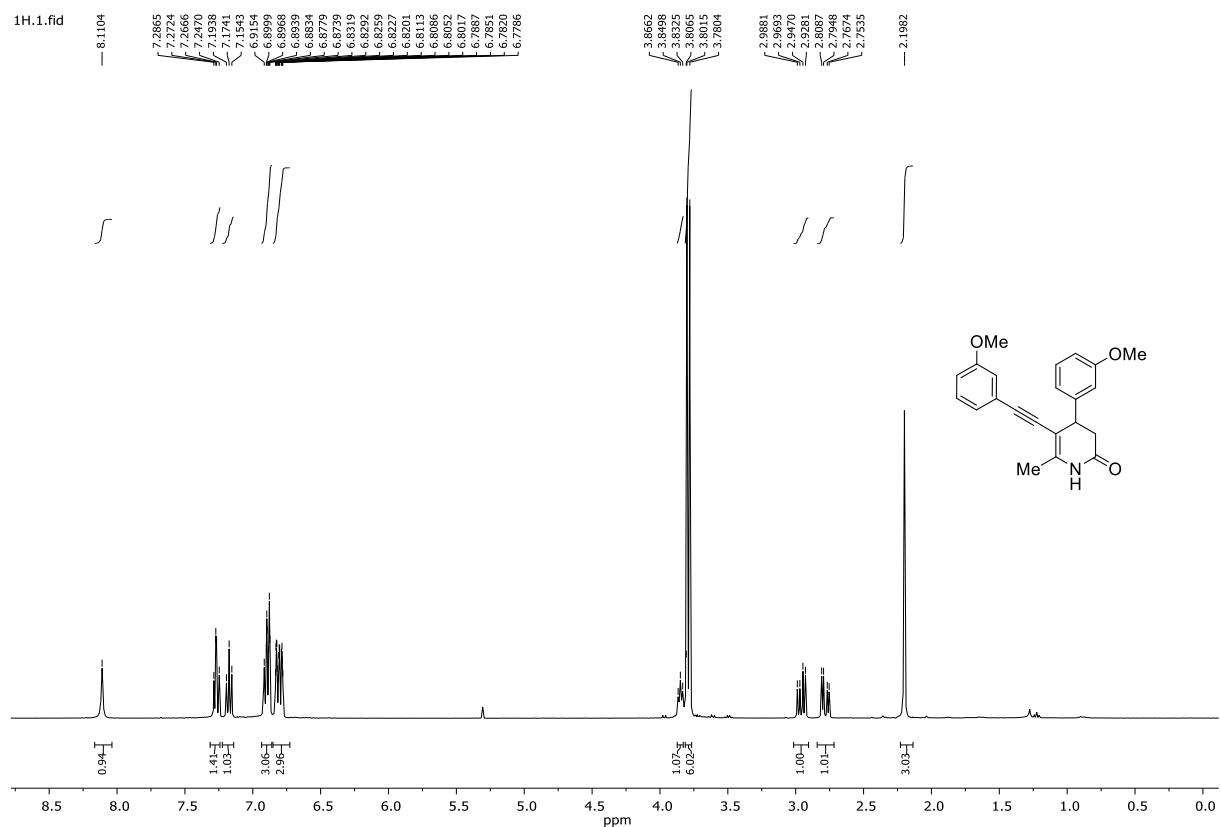
^1H NMR Spectrum of 4ca (400.1 MHz, CDCl_3)



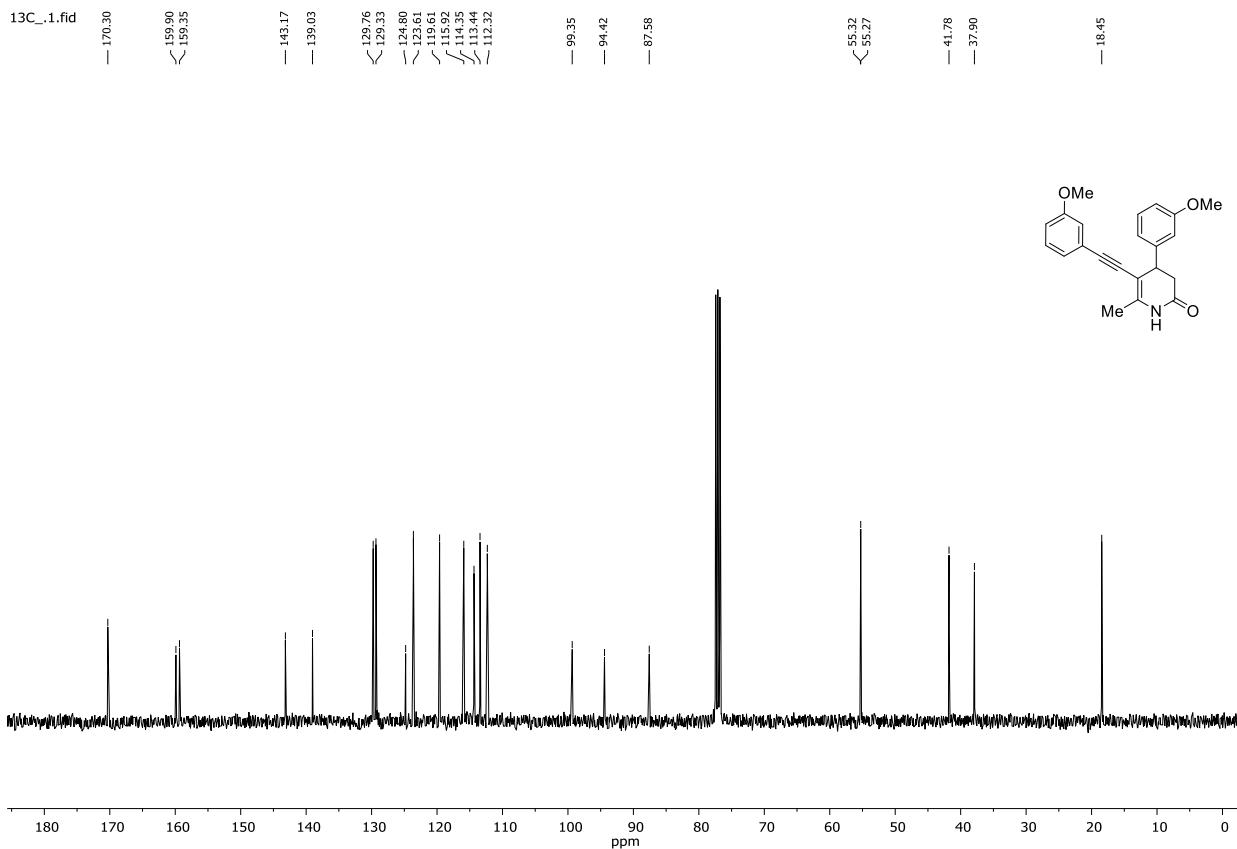
$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum of 4ca (100.6 MHz, CDCl_3)



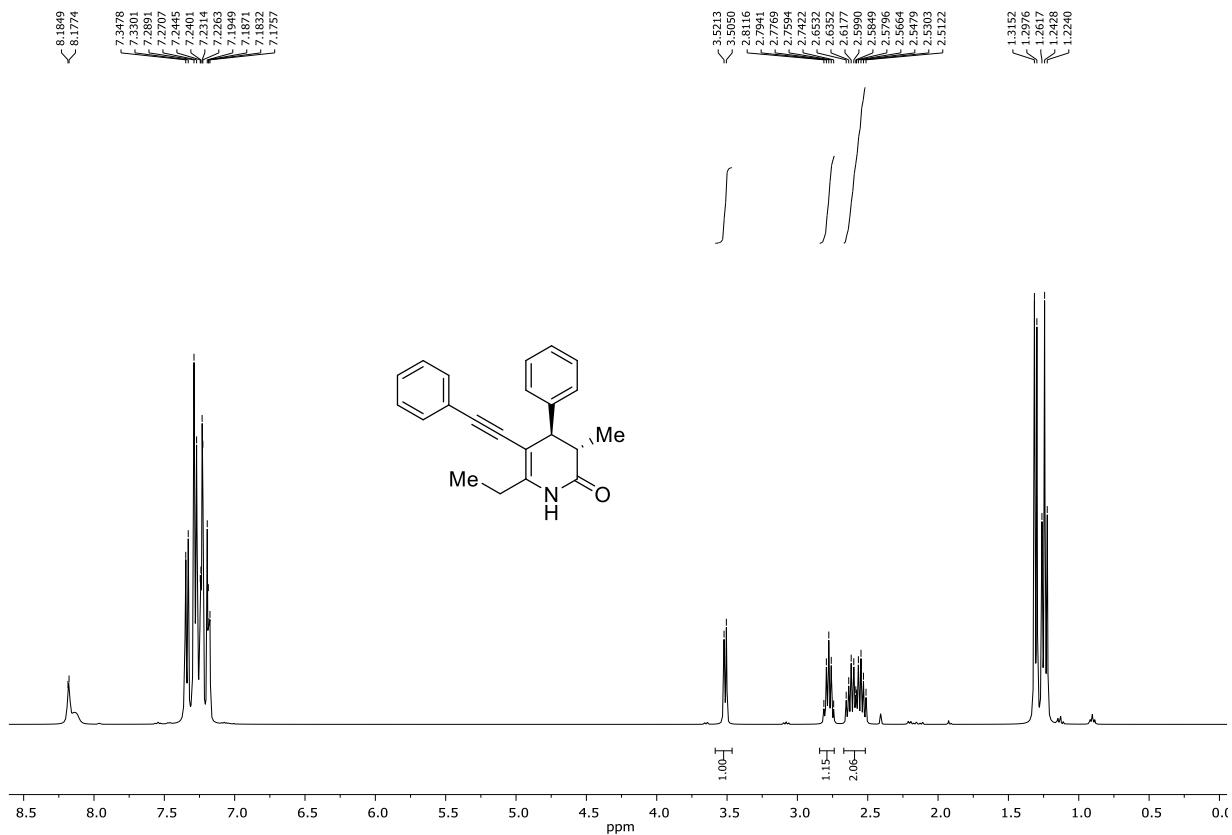
^1H NMR Spectrum of 4ga (400.1 MHz, CDCl_3)



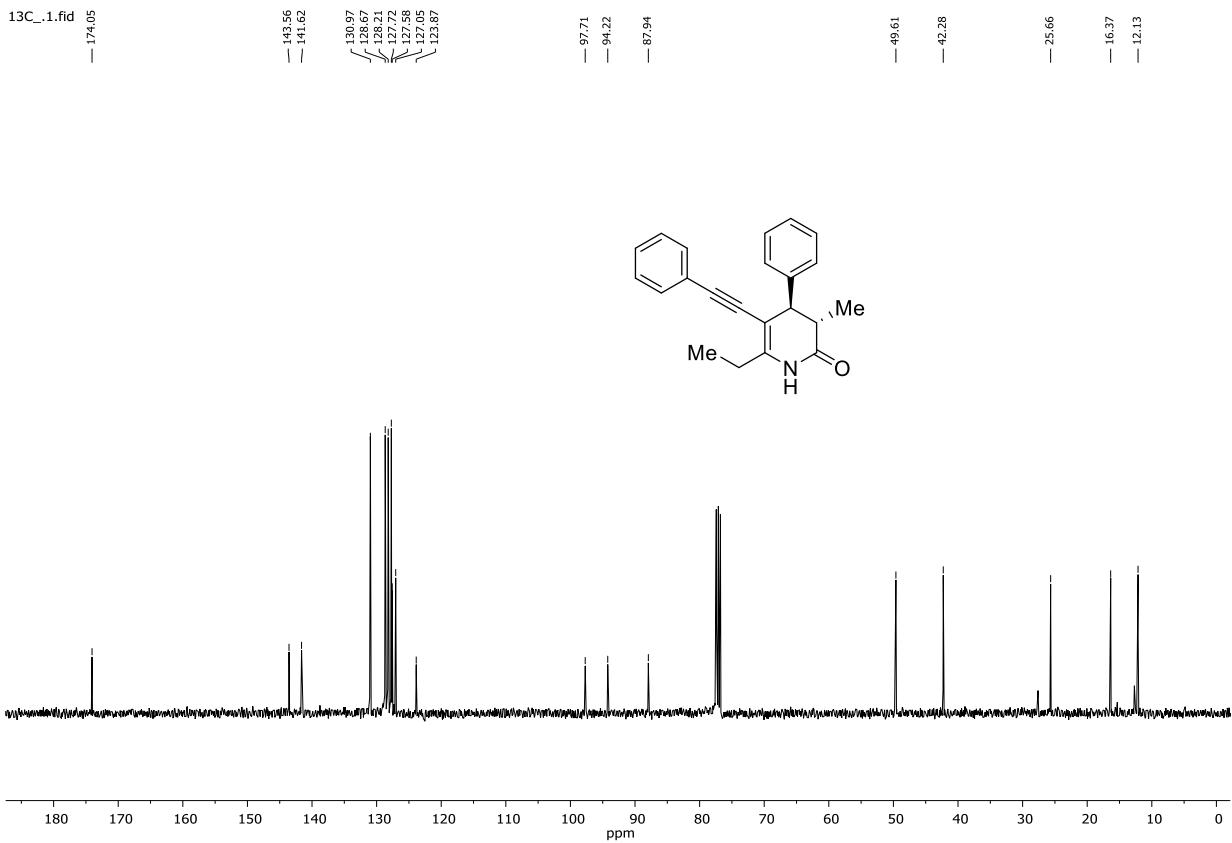
$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum of 4ga (100.6 MHz, CDCl_3)



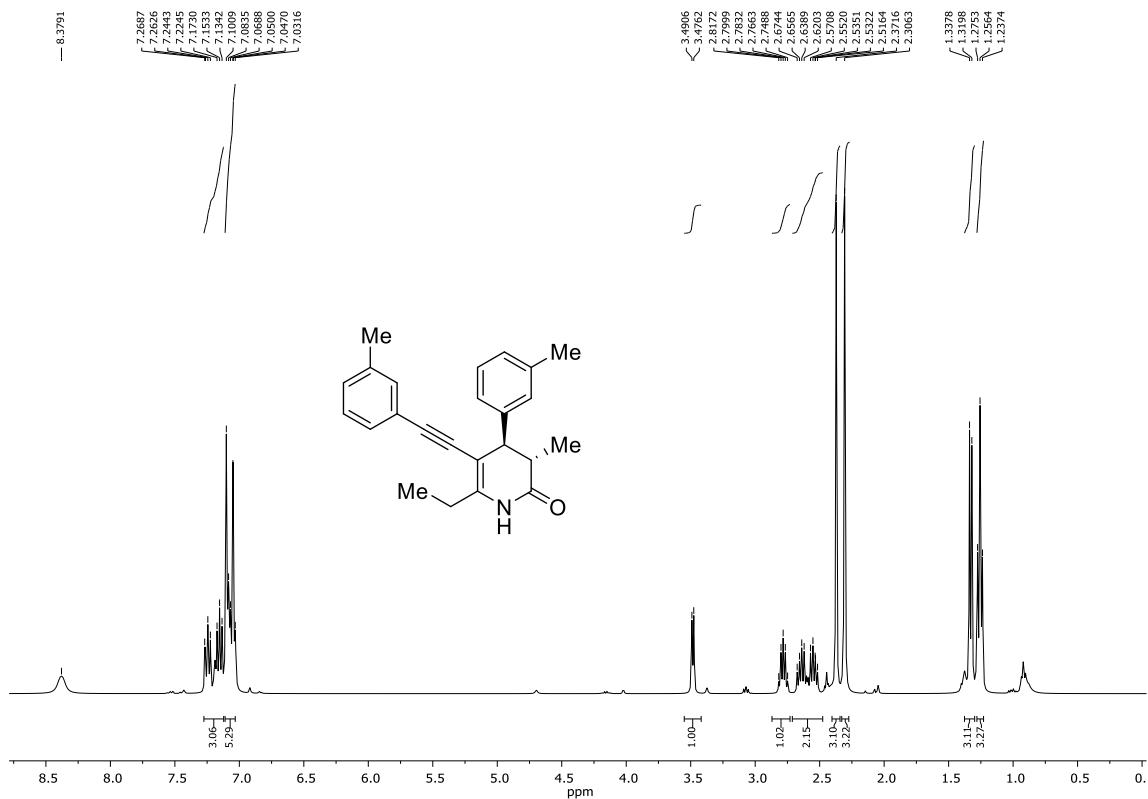
^1H NMR Spectrum of 4ab (400.1 MHz, CDCl_3)



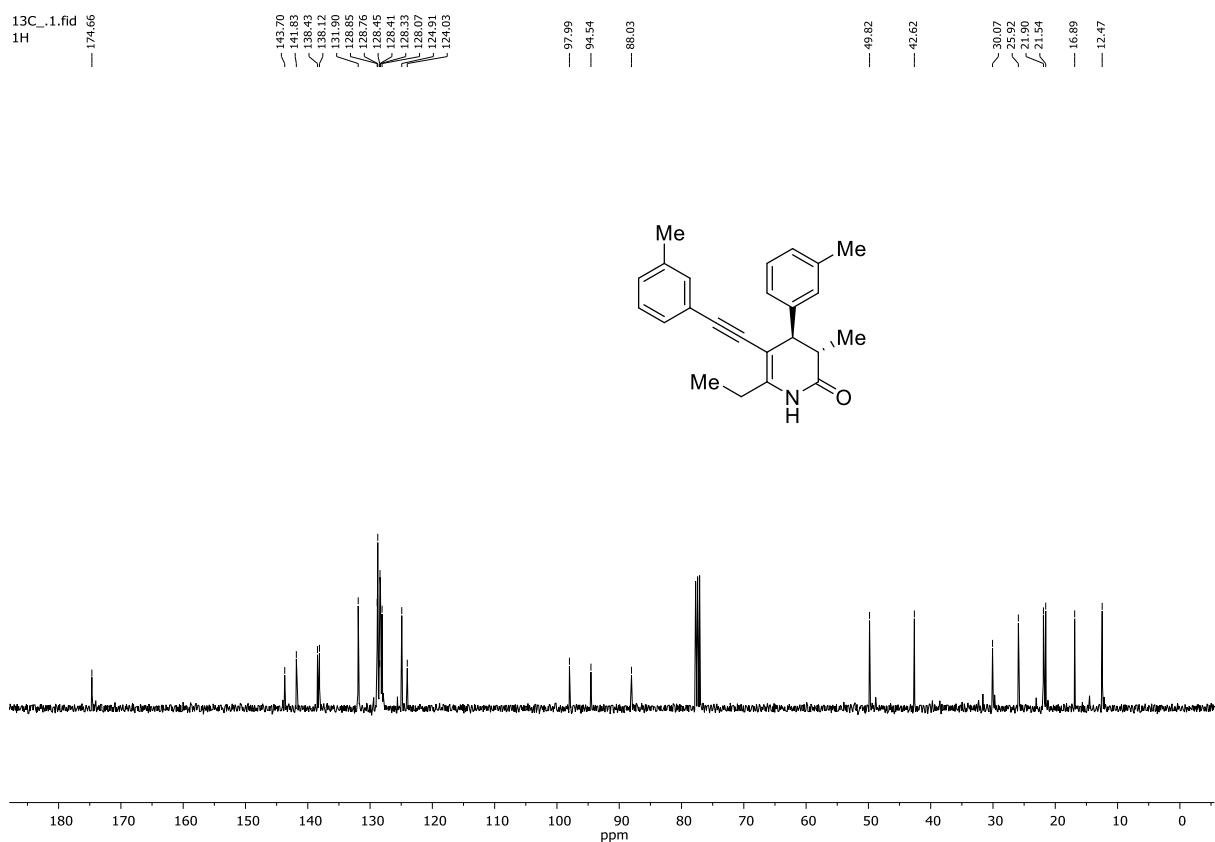
$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum of 4ab (100.6 MHz, CDCl_3)



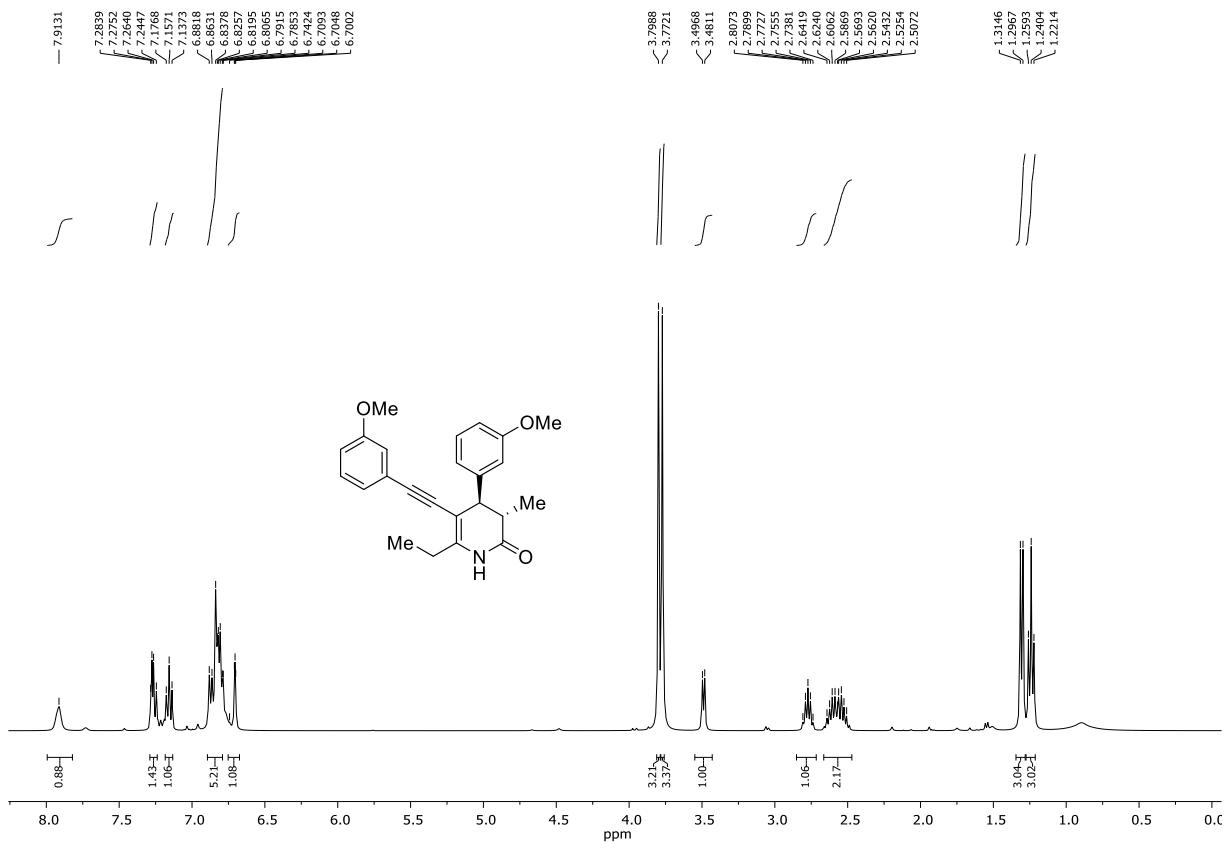
¹H NMR Spectrum of **4cb** (400.1 MHz, CDCl₃)



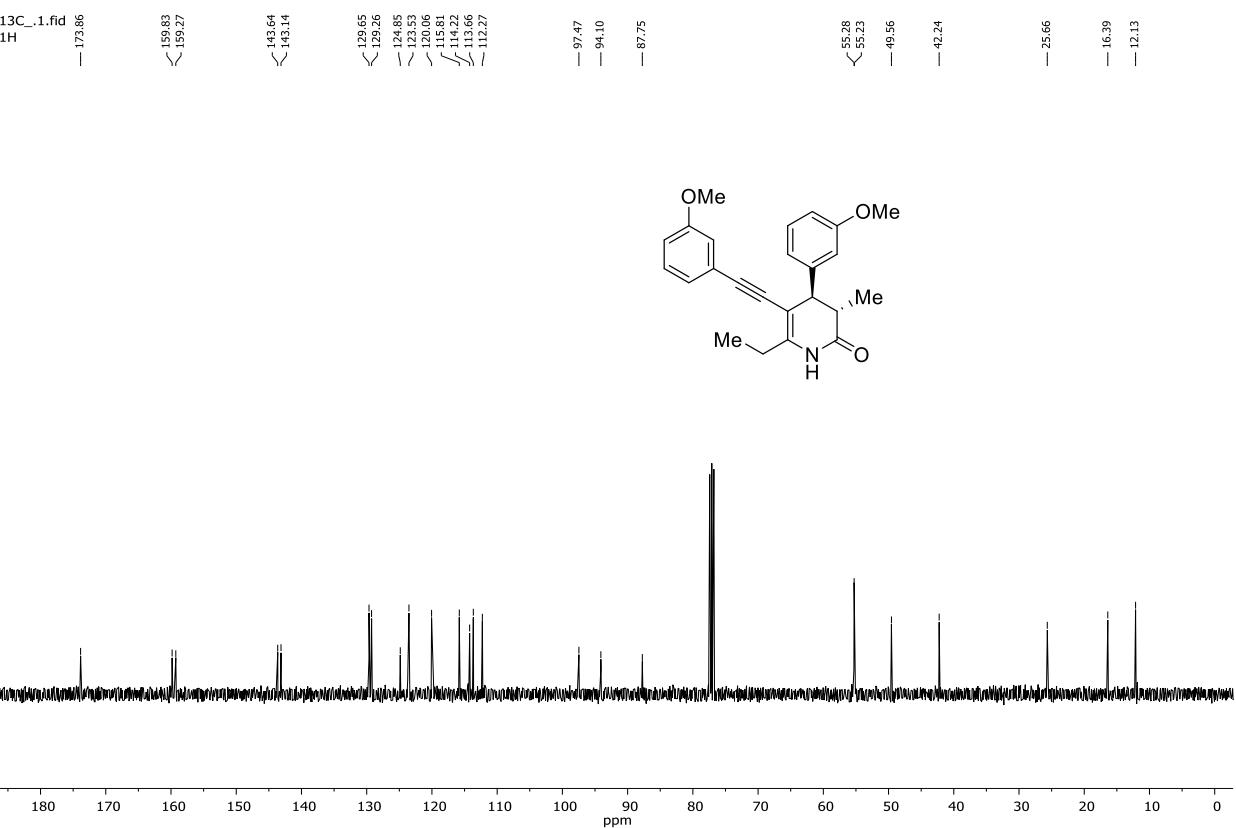
¹³C{¹H} NMR Spectrum of **4cb** (100.6 MHz, CDCl₃)



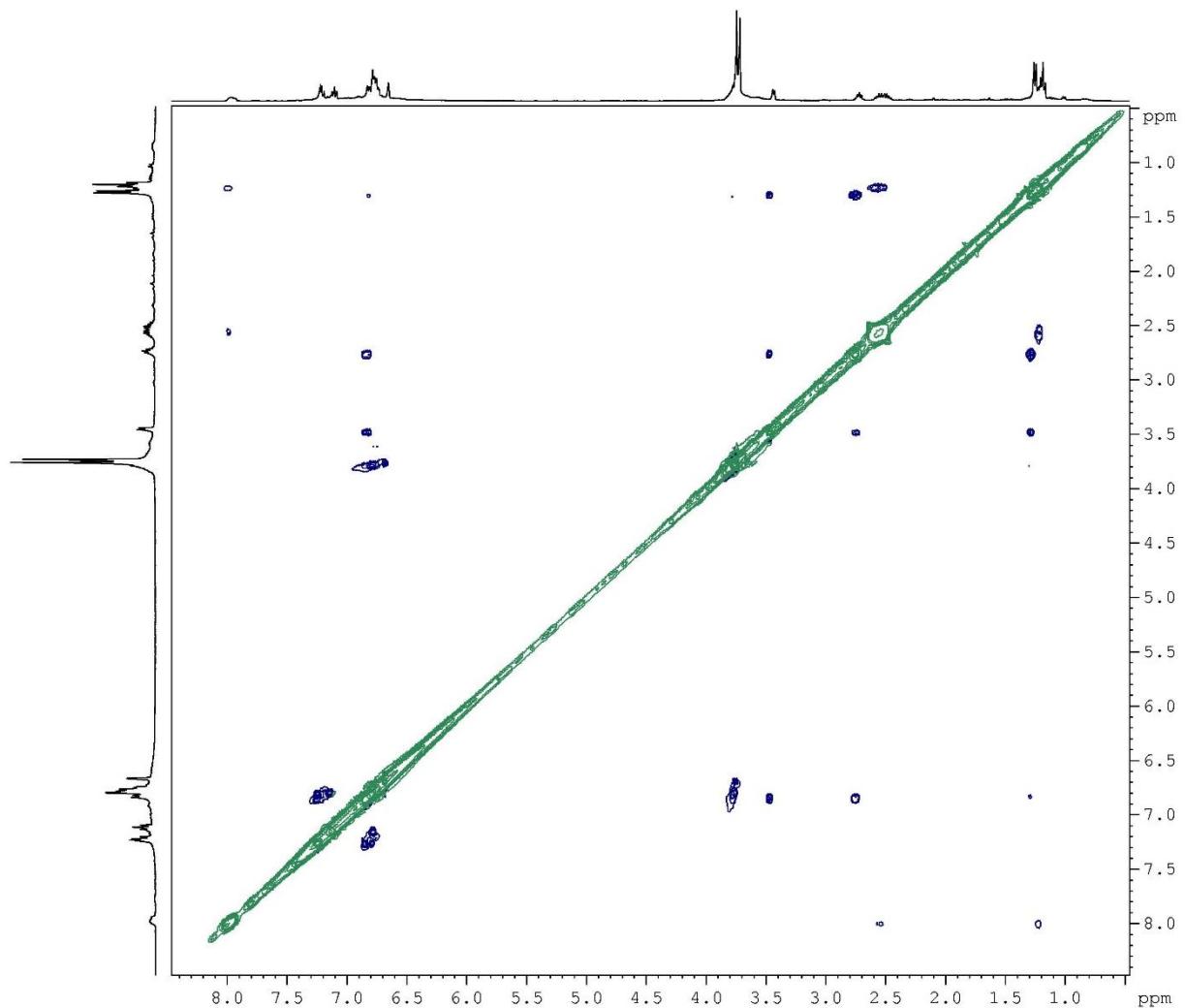
¹H NMR Spectrum of 4gb (400.1 MHz, CDCl₃)



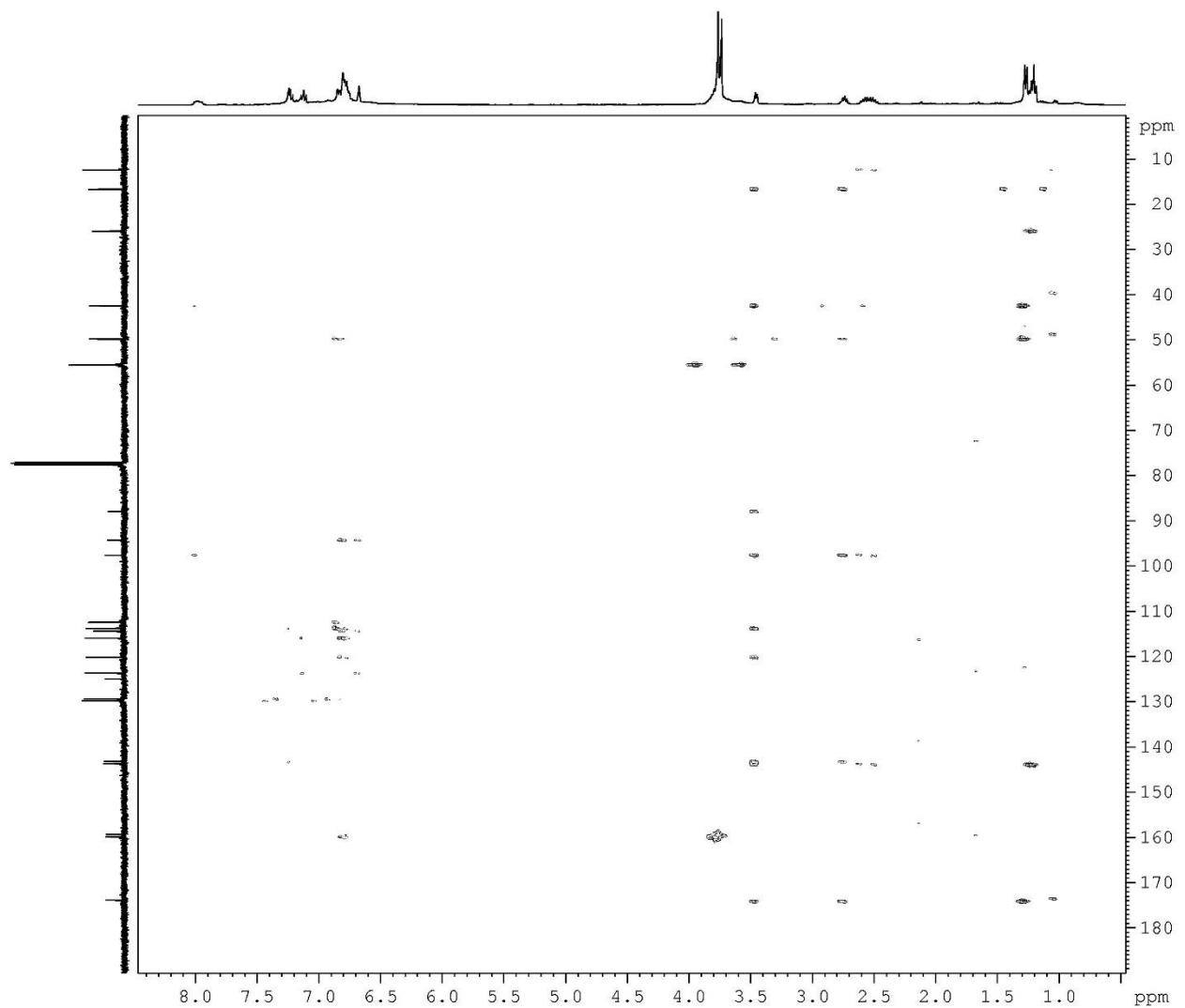
$^{13}\text{C}\{\text{H}\}$ NMR Spectrum of 4gb (100.6 MHz, CDCl_3)



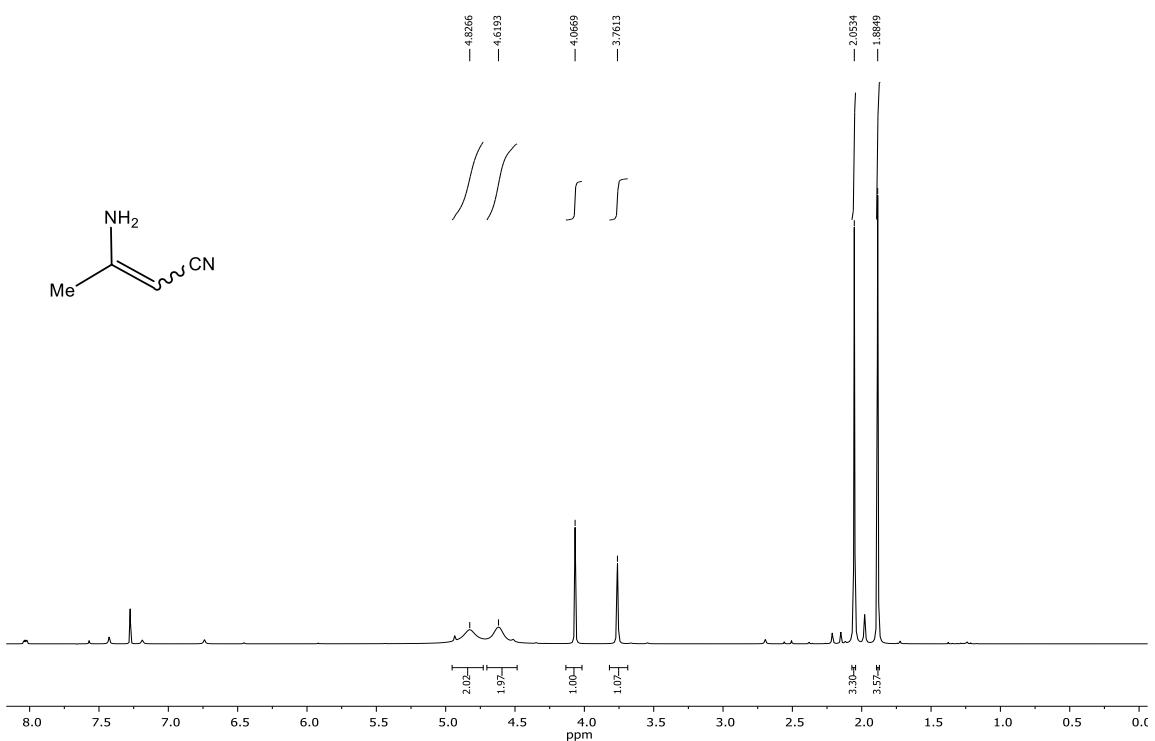
2D NOESY Spectrum of 4gb (CDCl₃)



2D ^1H - ^{13}C HMBC Spectrum of 4gb (CDCl_3)



¹H NMR Spectrum of 3-aminobut-2-enenitrile (400.1 MHz, CDCl₃)



¹H NMR Spectrum of 3-amino-2-propylhept-2-enenitrile (400.1 MHz, CDCl₃)

