

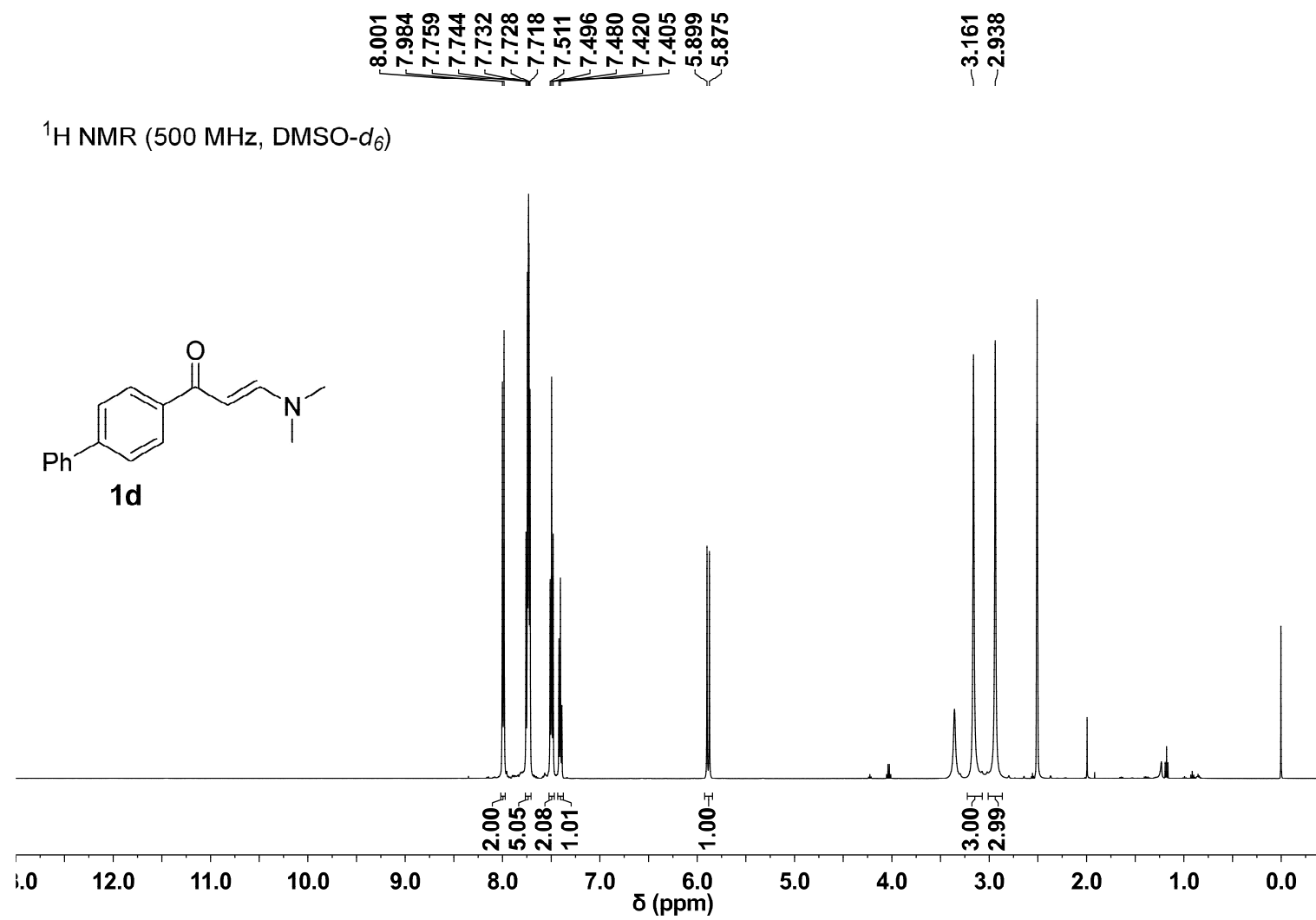
**Supporting Information for:**

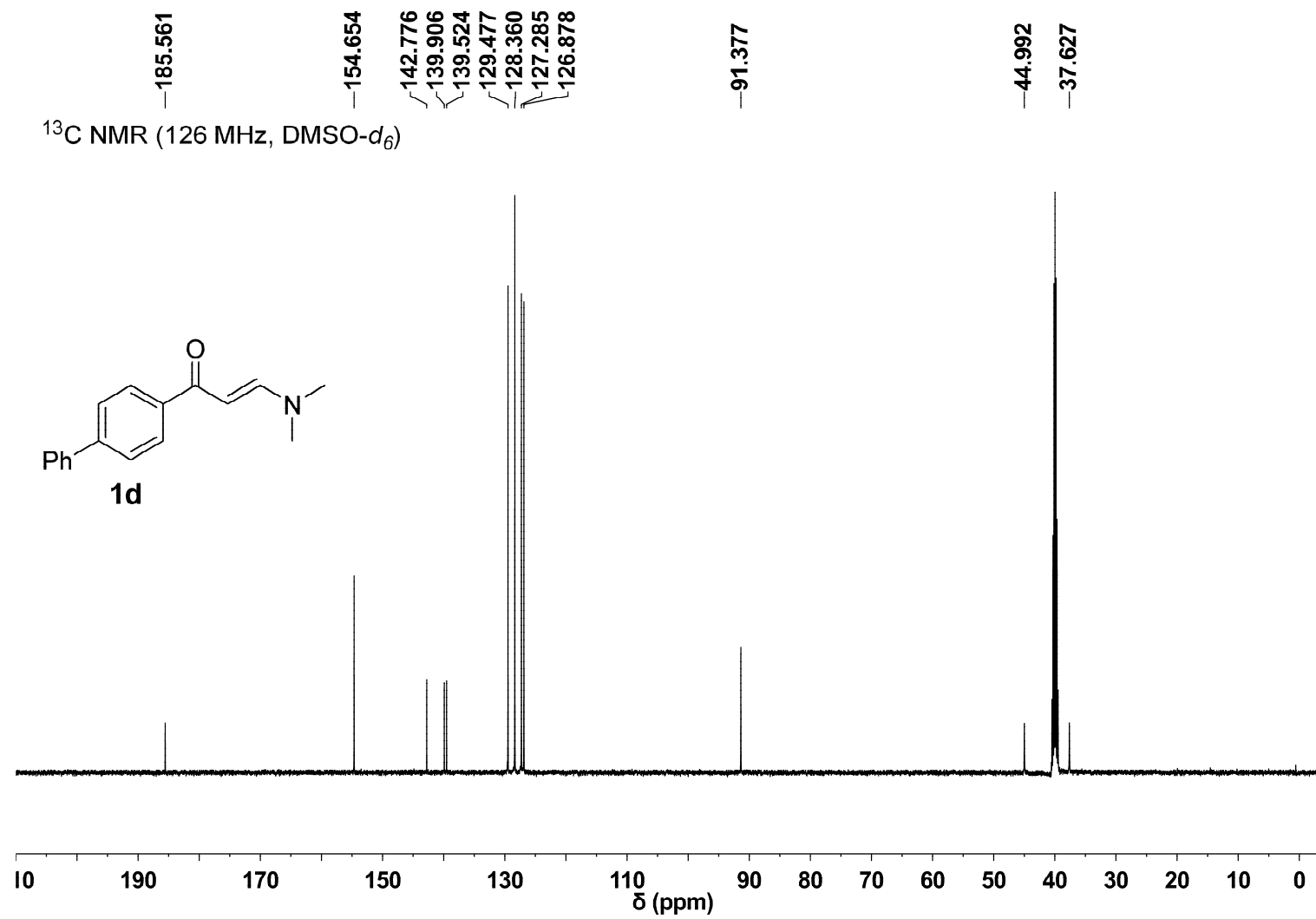
**Rh(III)-Catalyzed Enaminone-Directed C-H Coupling with  $\alpha$ -Diazo- $\alpha$ -phosphonoacetate for Reactivity Discovery:  
Fluoride-Mediated Dephosphonation for C-C Coupling Reactions**

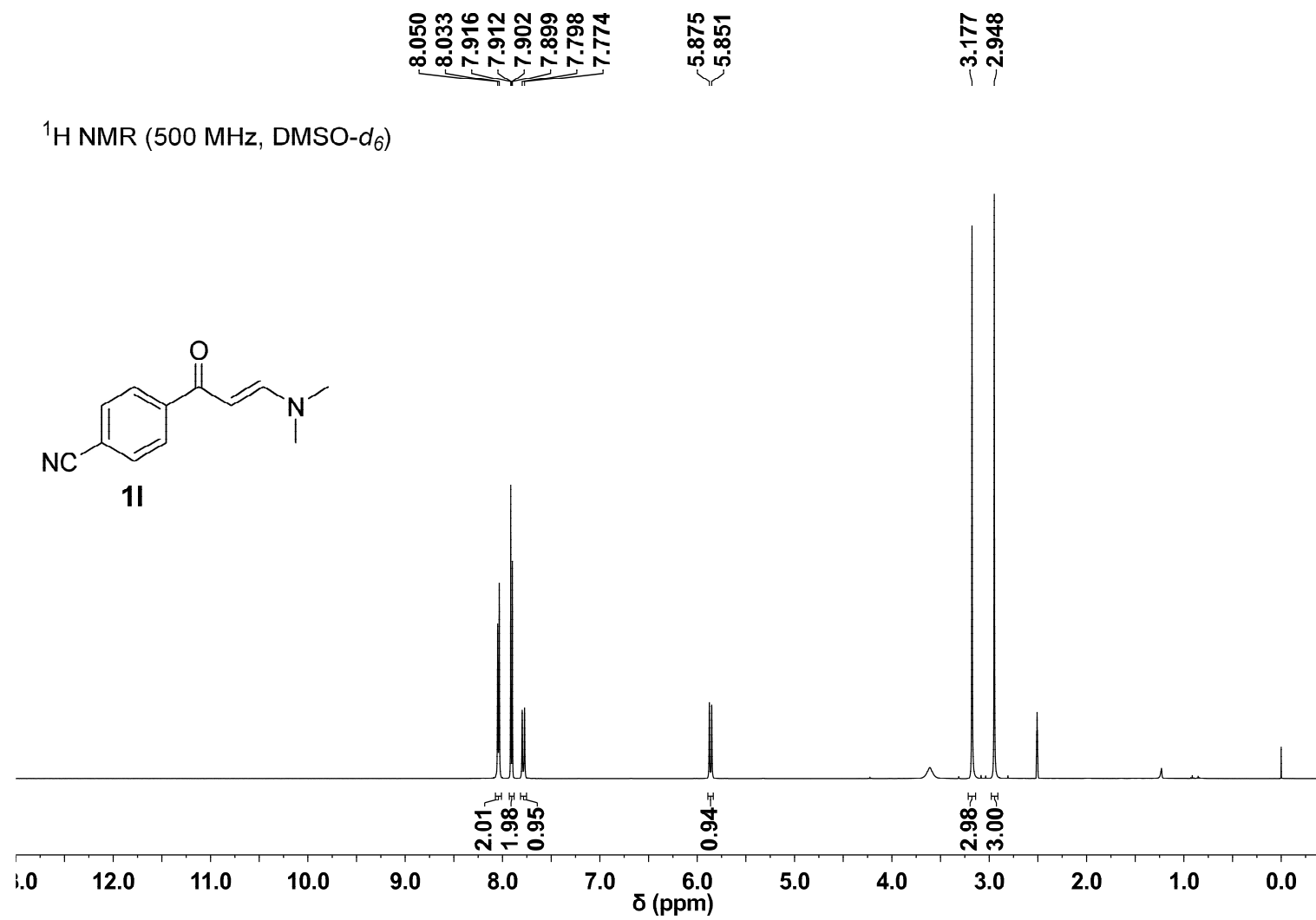
*Chao Song, Chen Yang, Hua Zeng, Wenjing Zhang, Shan Guo, and Jin Zhu\**

*Department of Polymer Science and Engineering, School of Chemistry and Chemical Engineering, State Key Laboratory of Coordination  
Chemistry, Nanjing University, Nanjing 210023, China.*

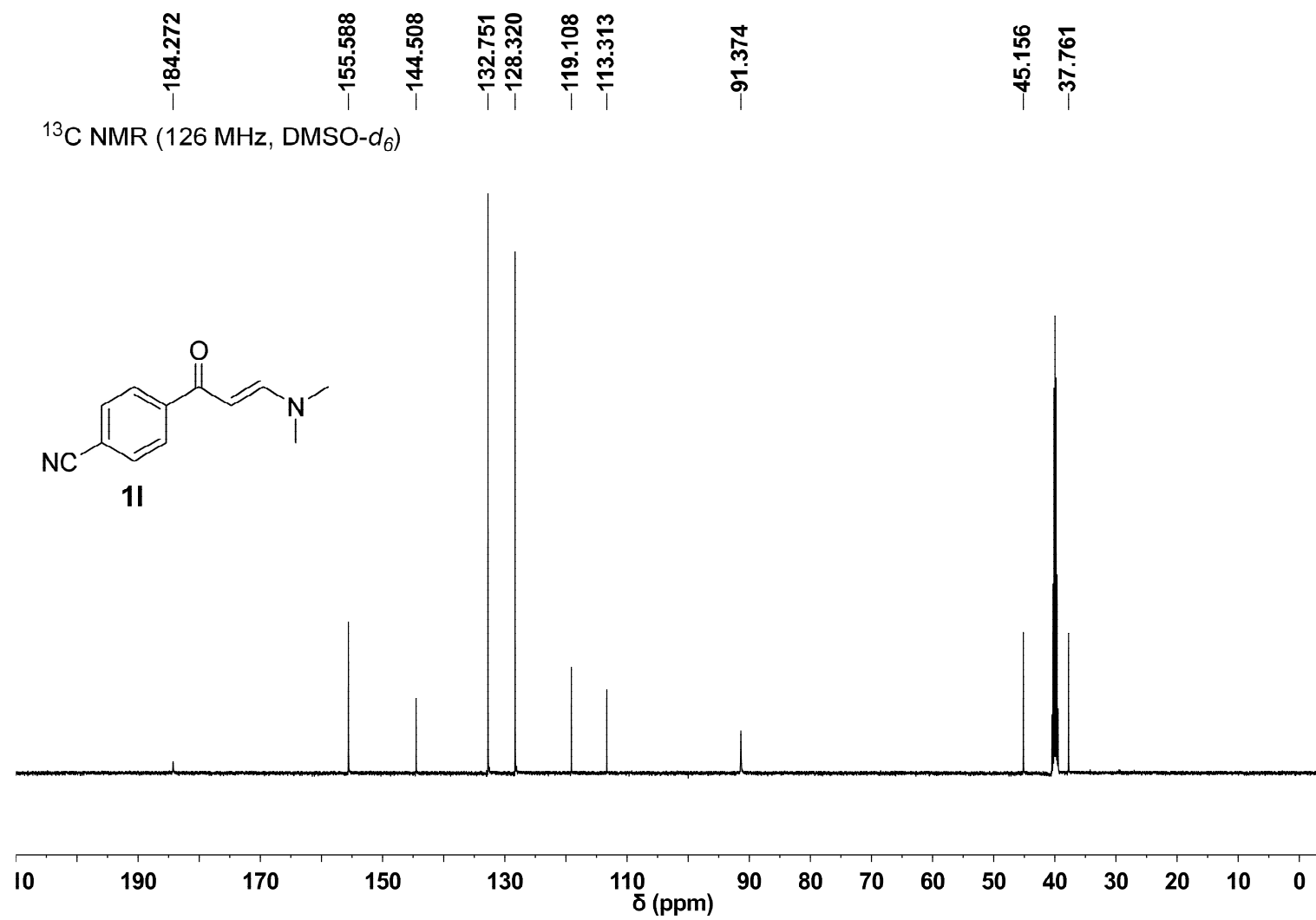
\*Corresponding author. Email: jinz@nju.edu.cn

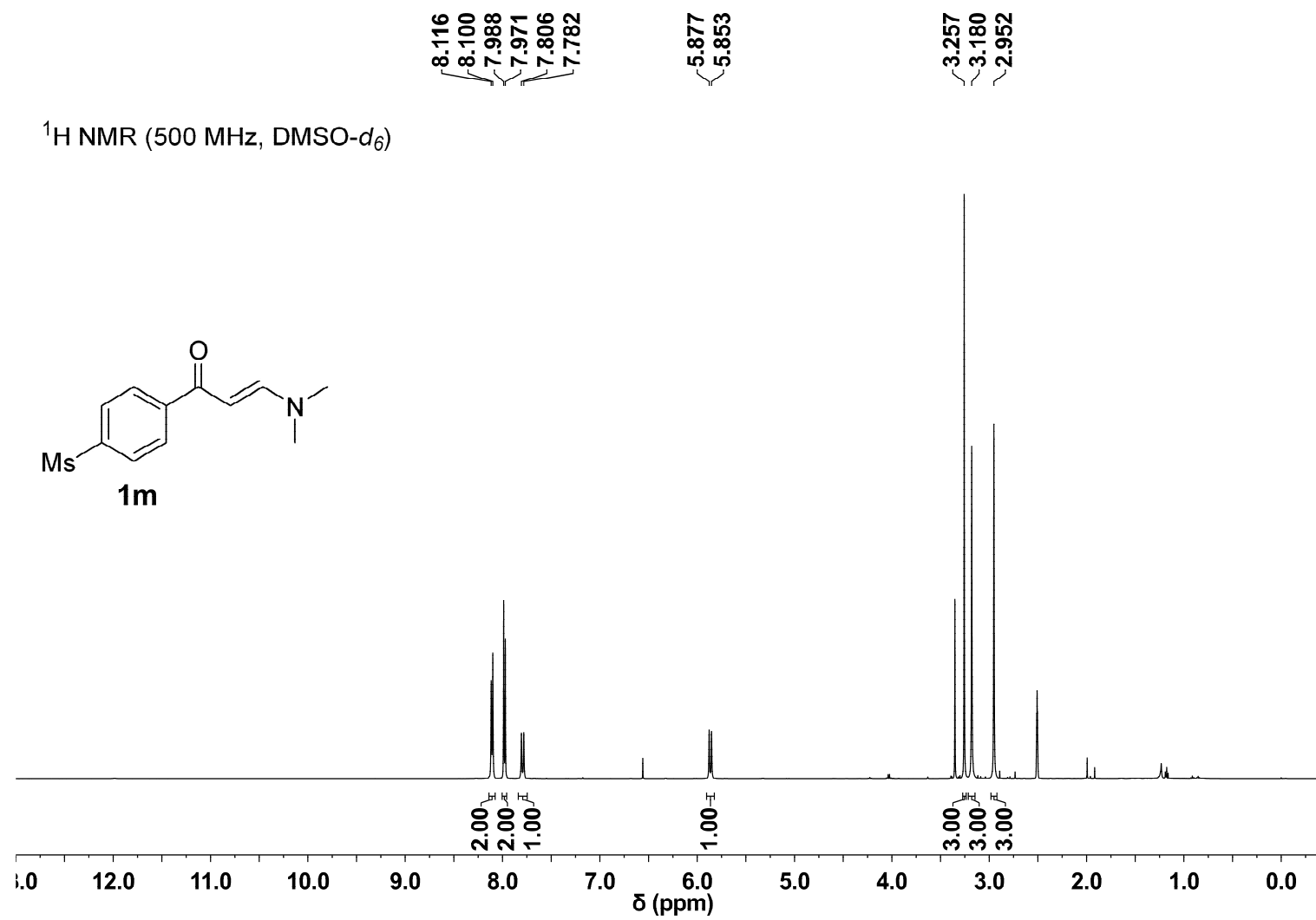


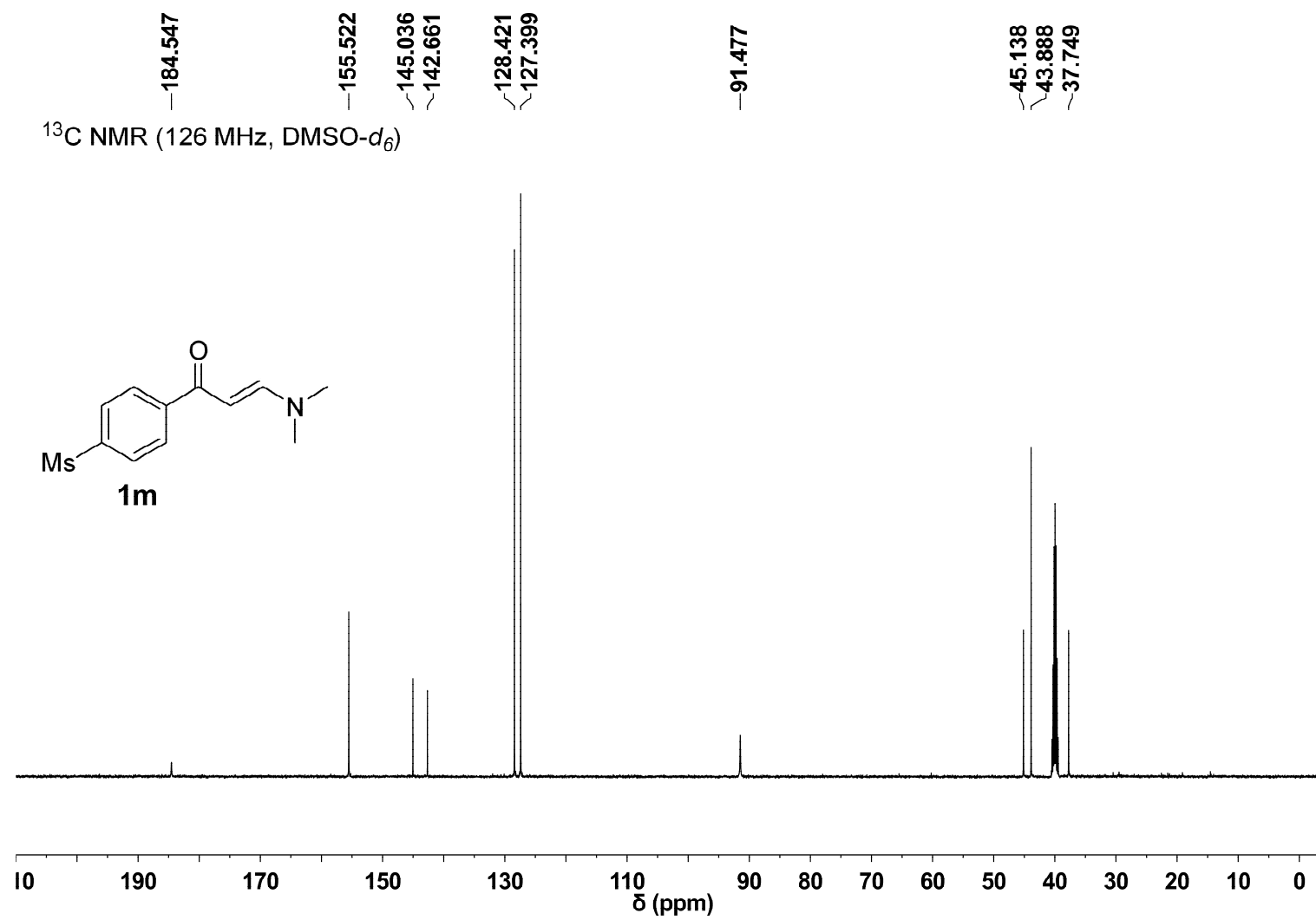


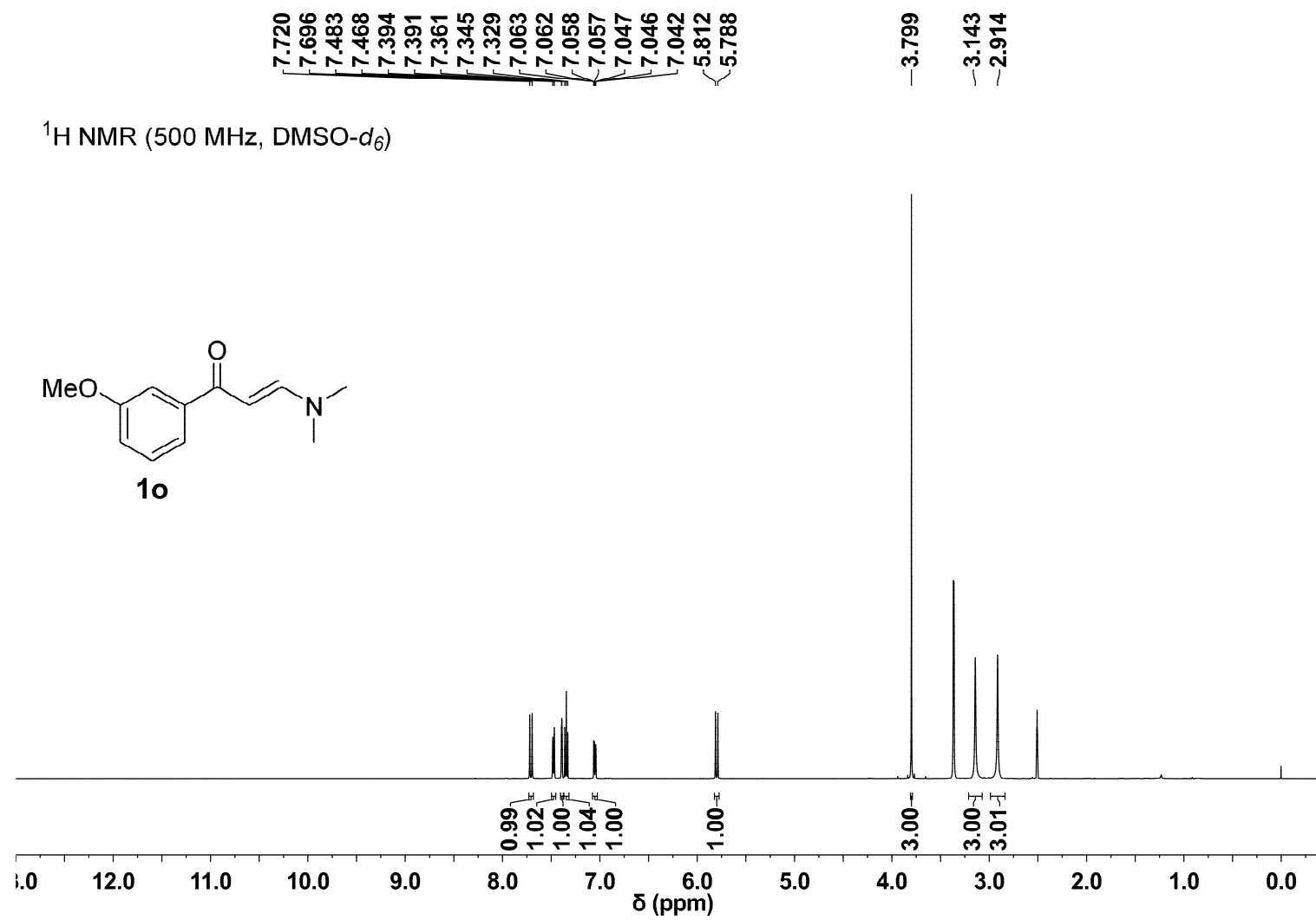


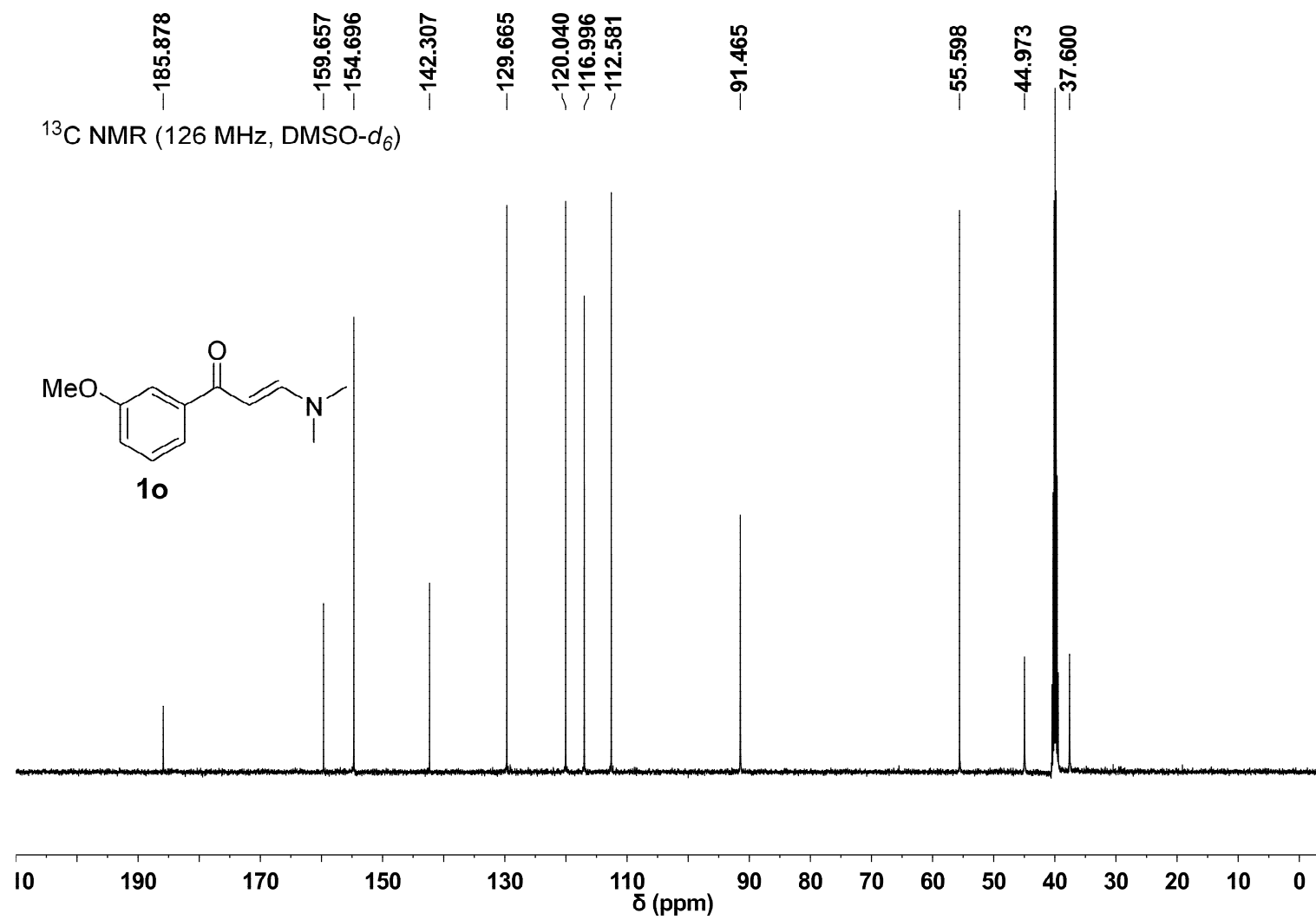


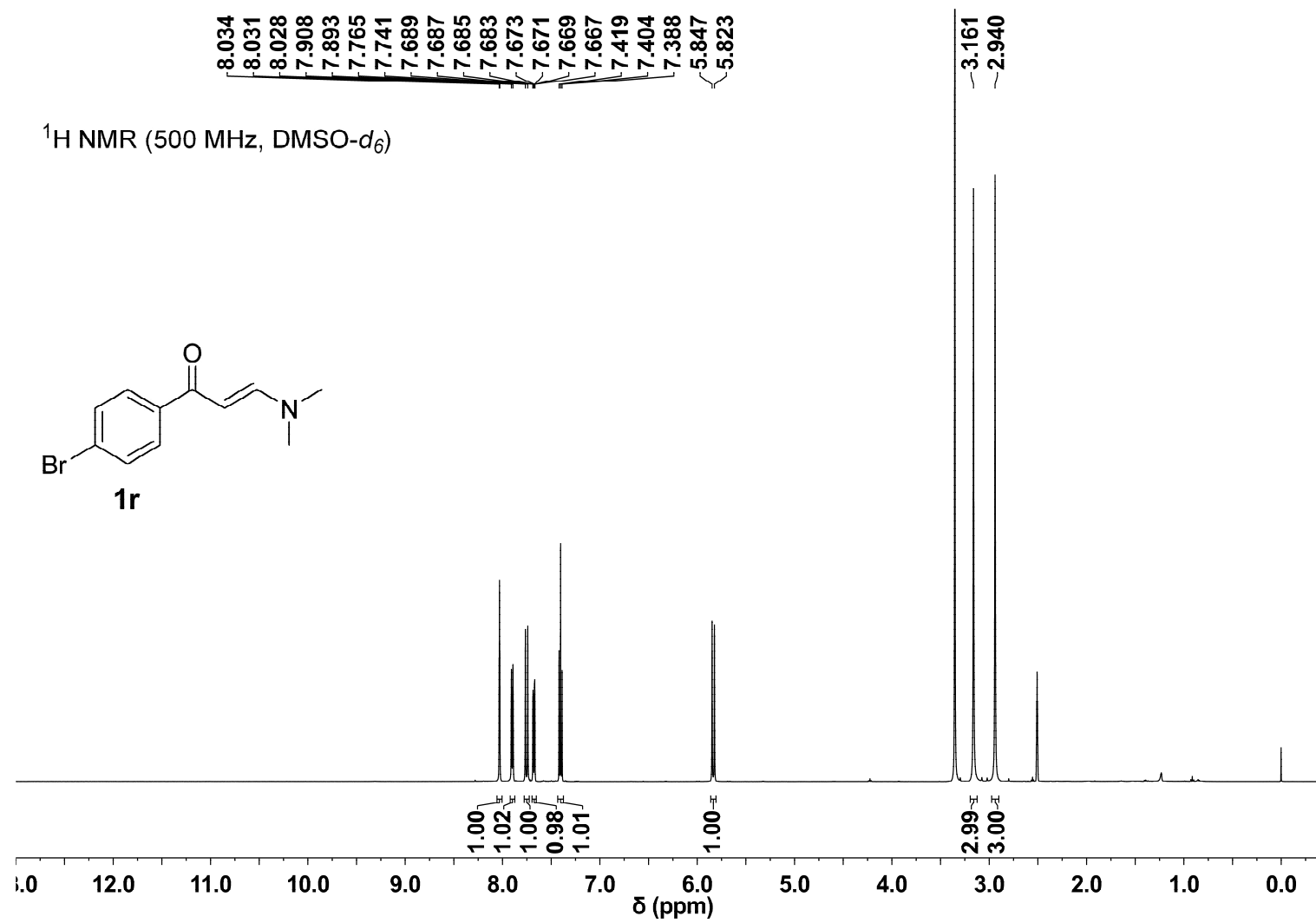


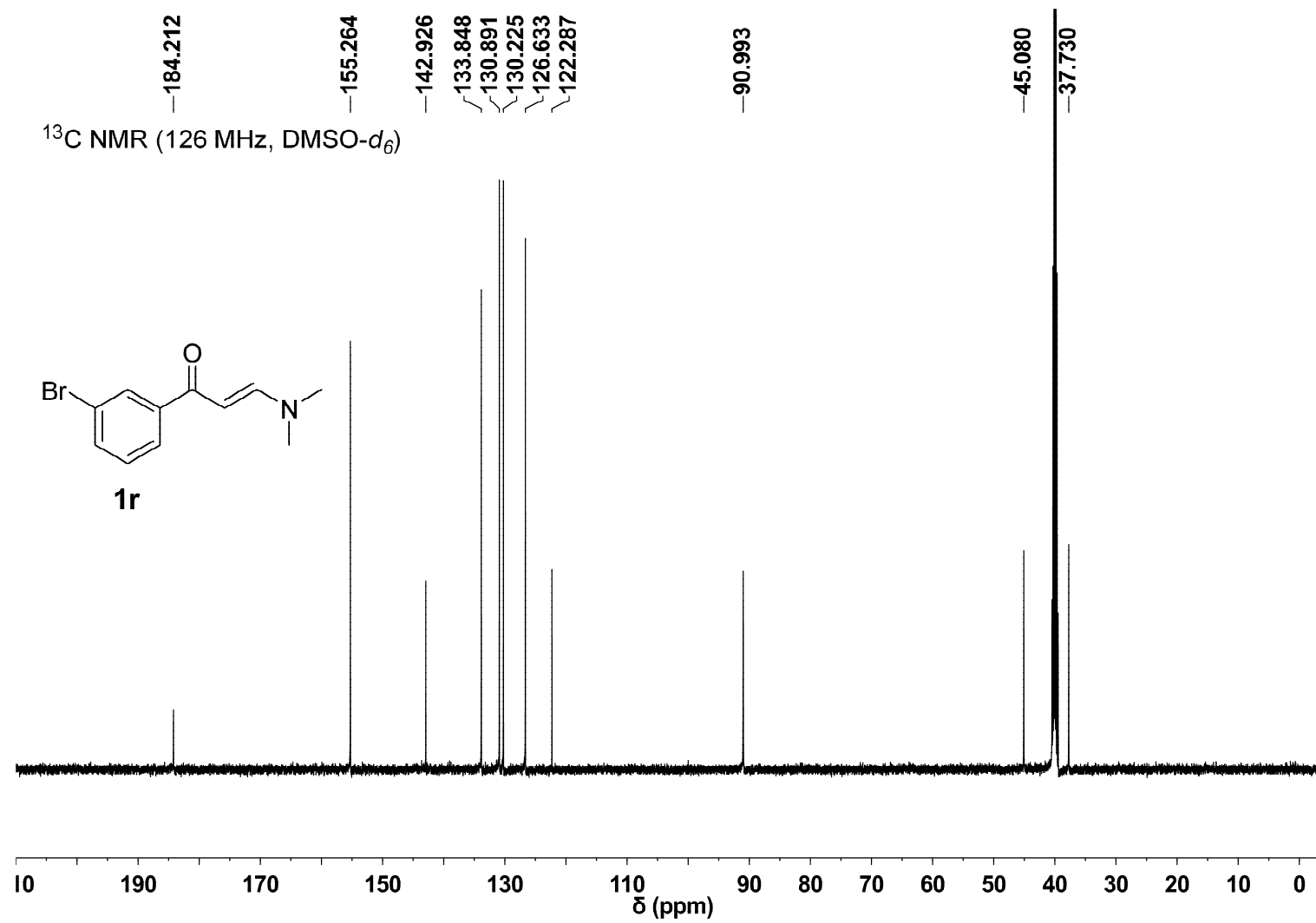


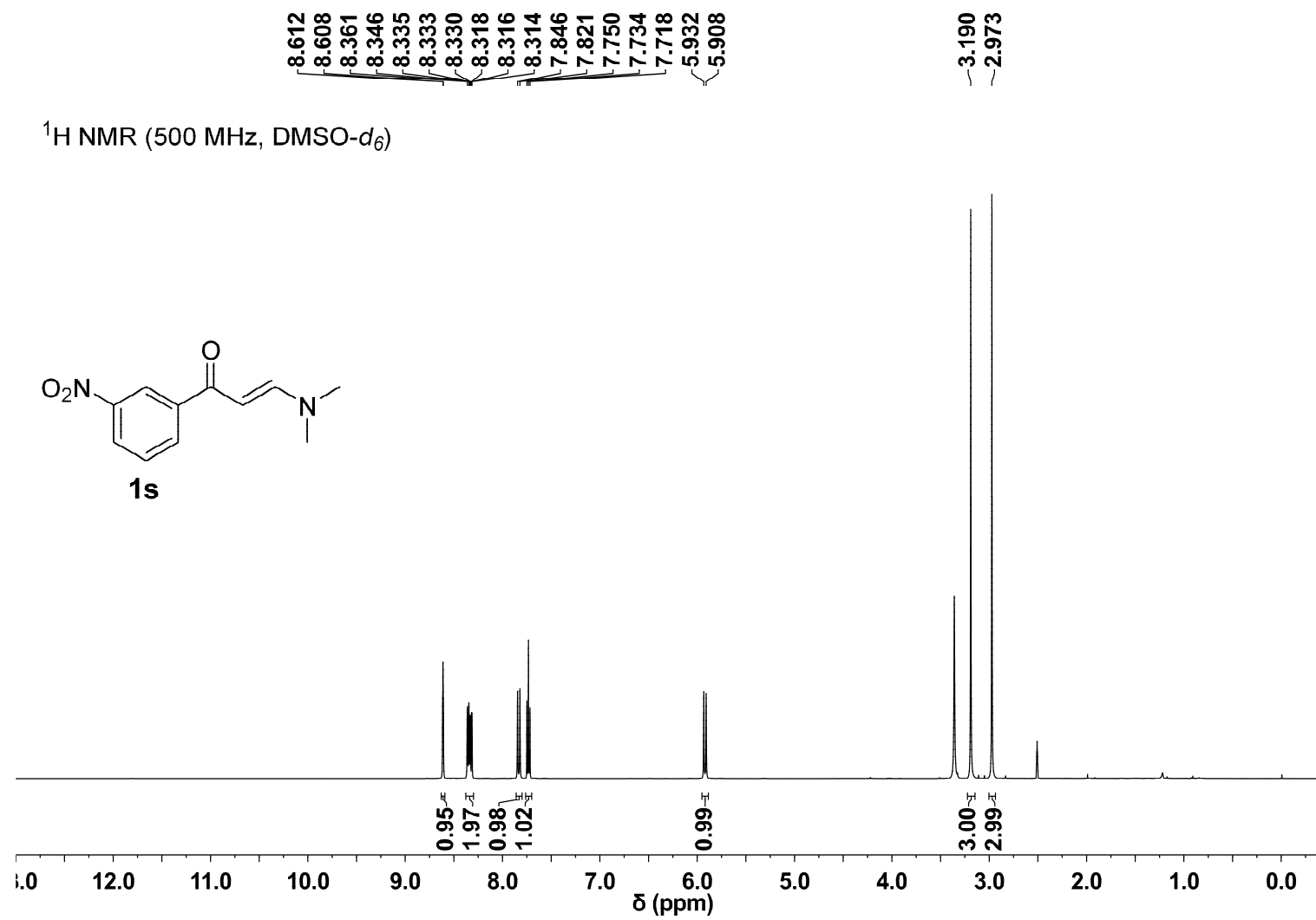




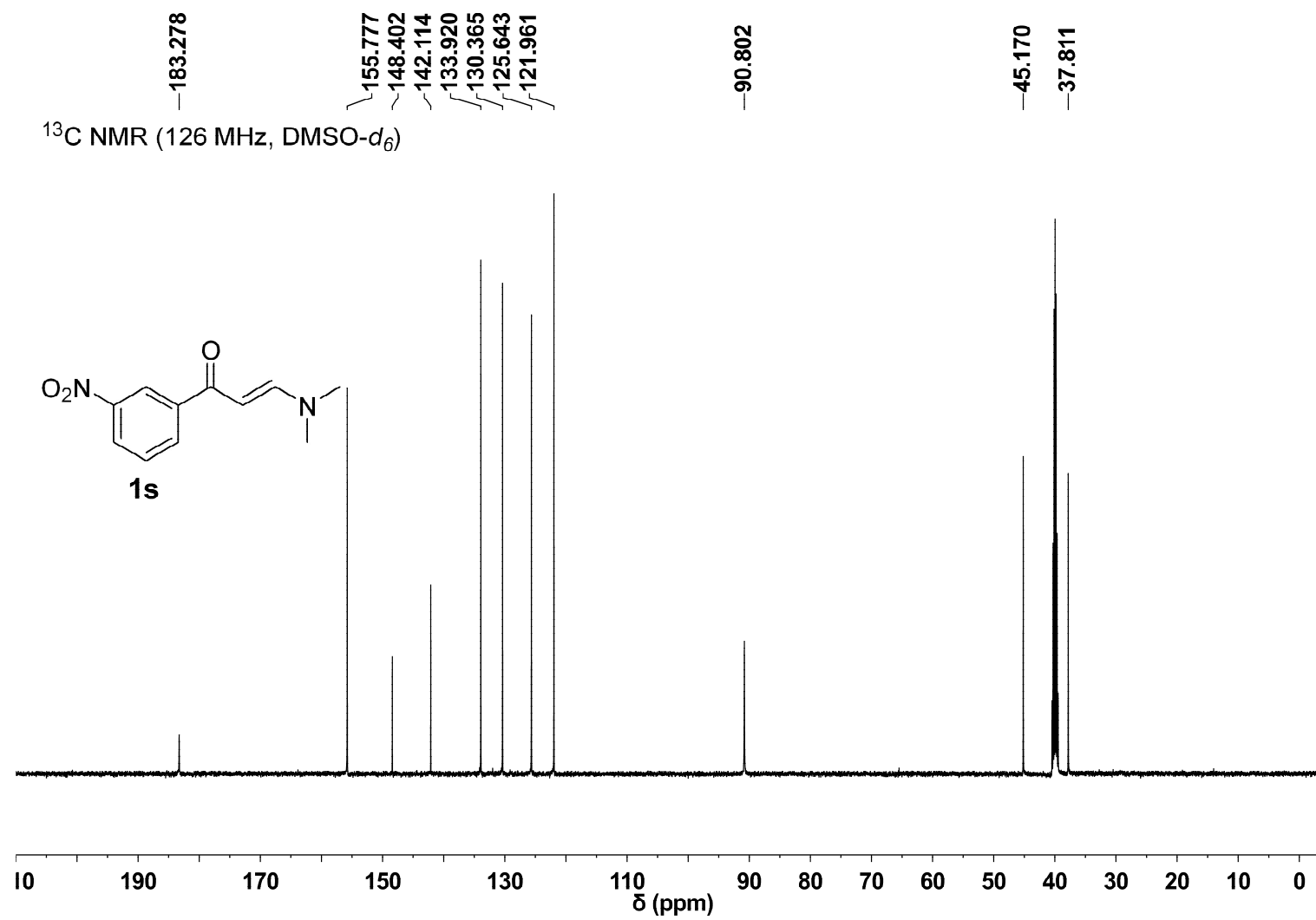


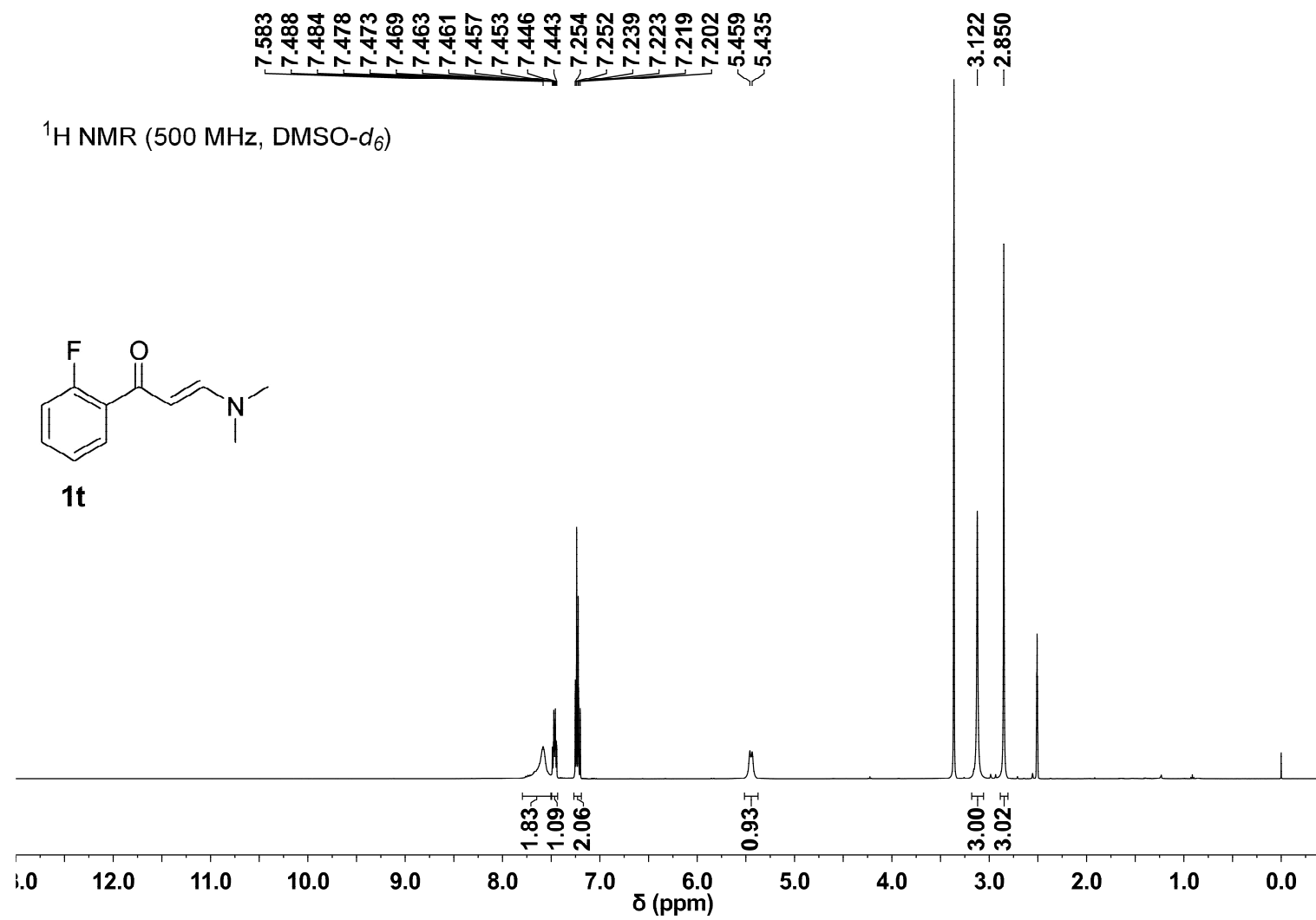


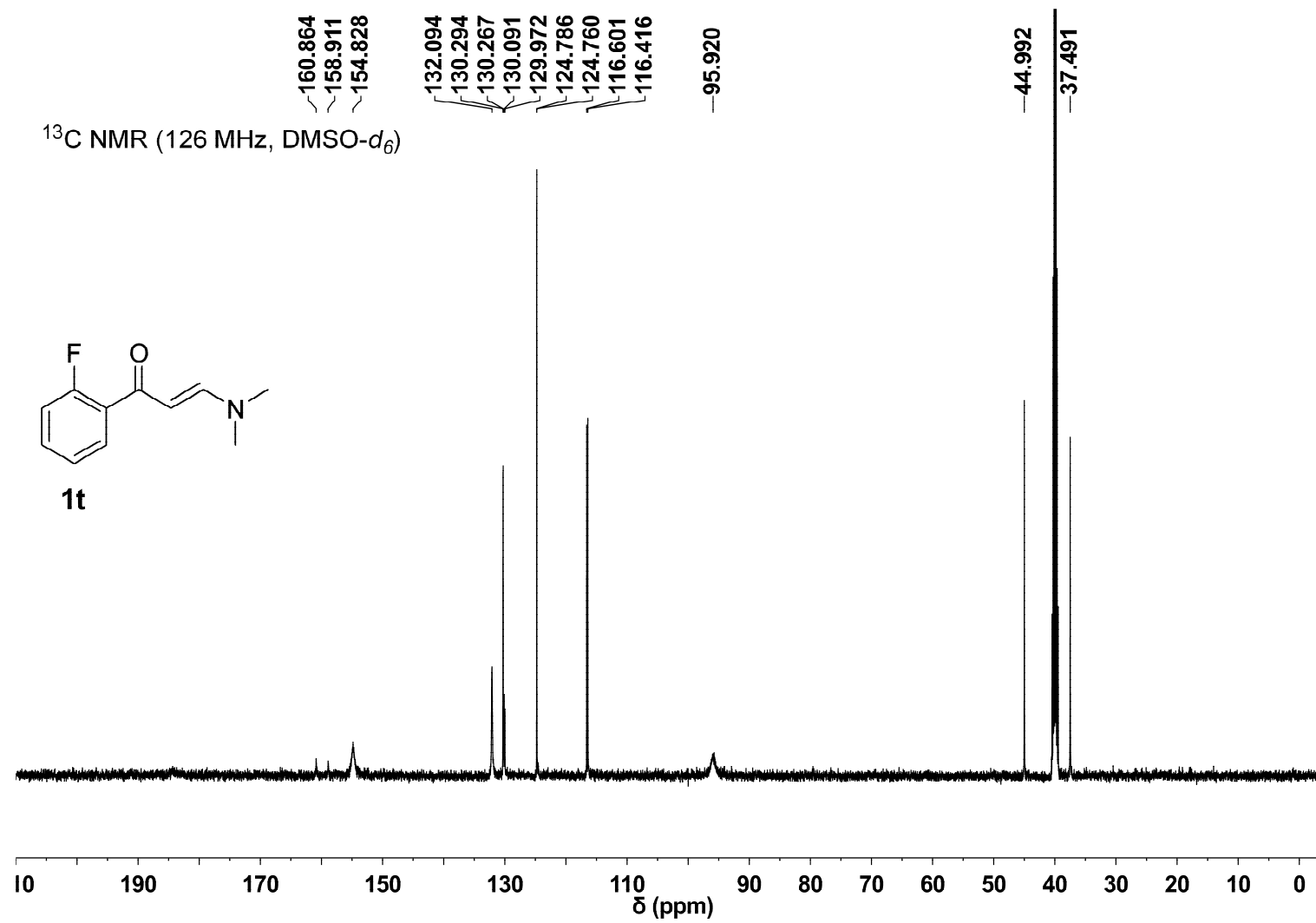


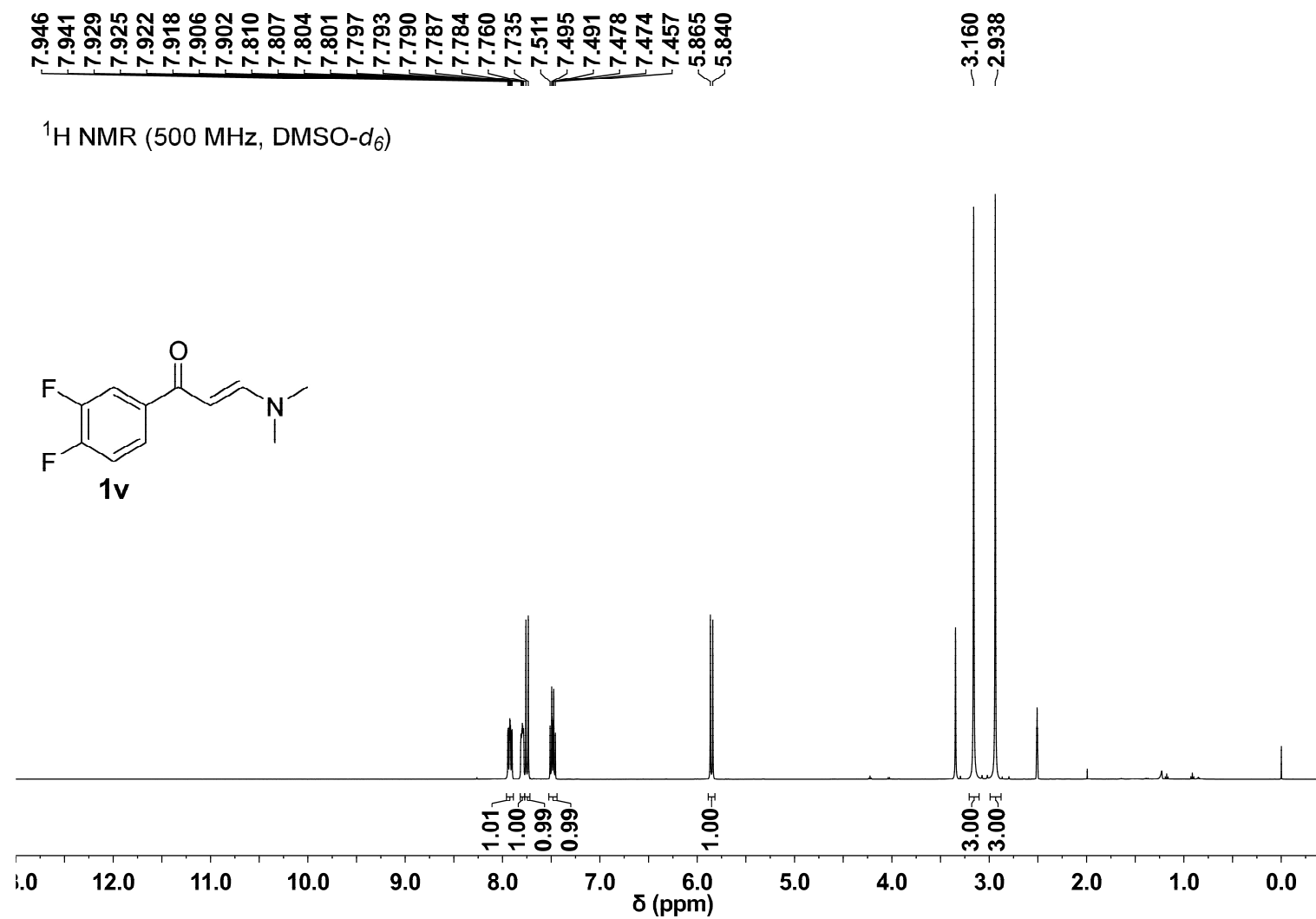


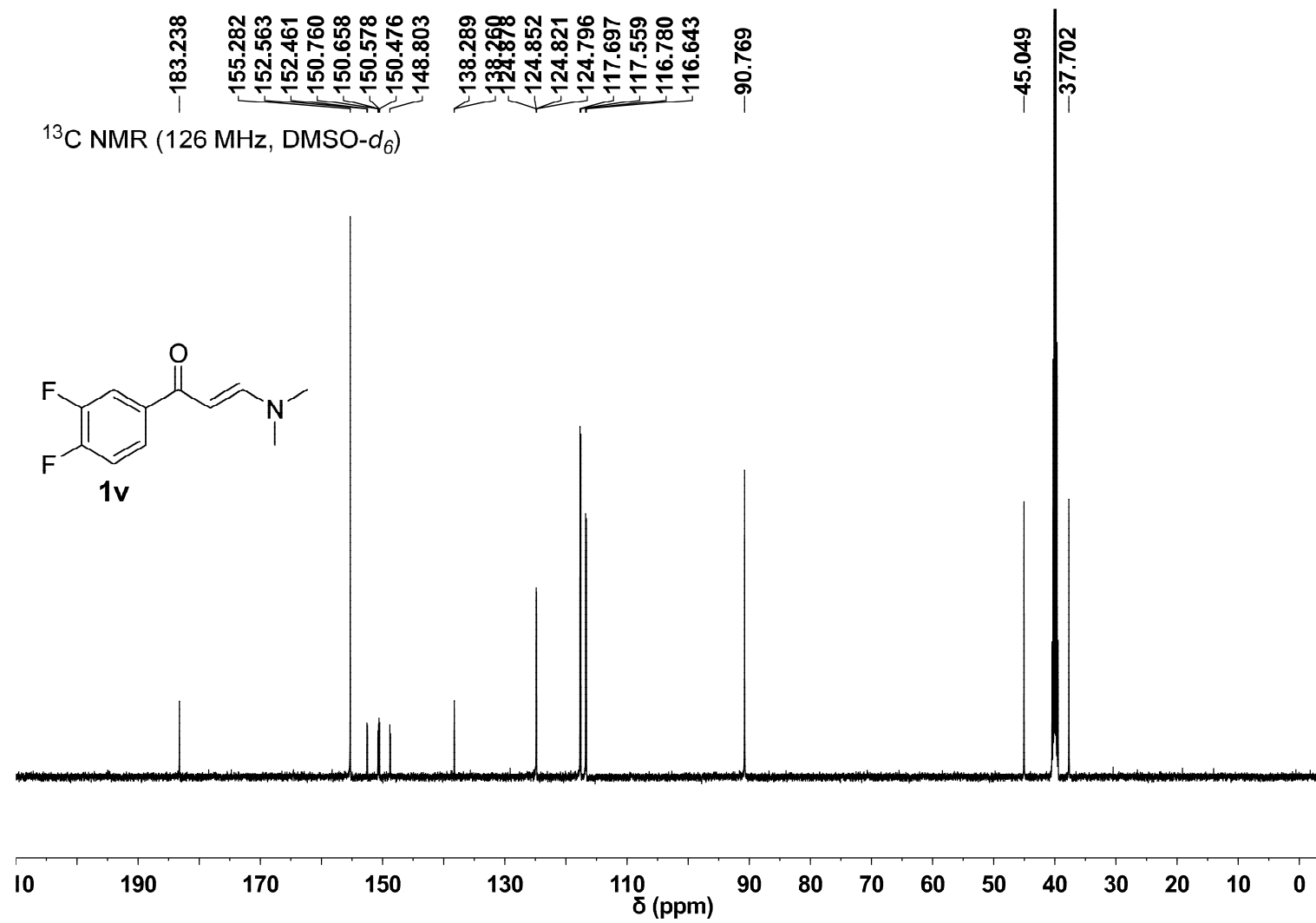


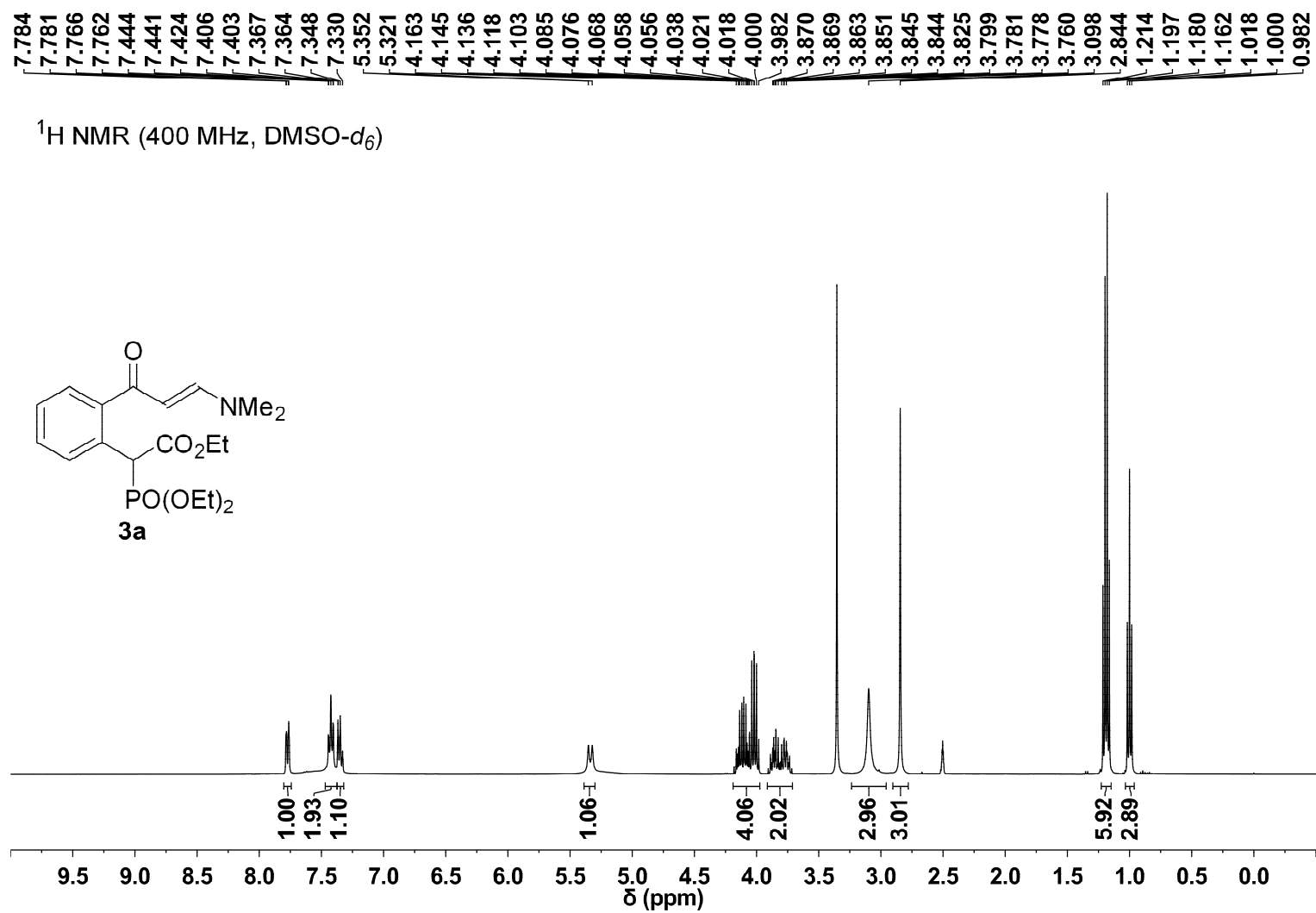


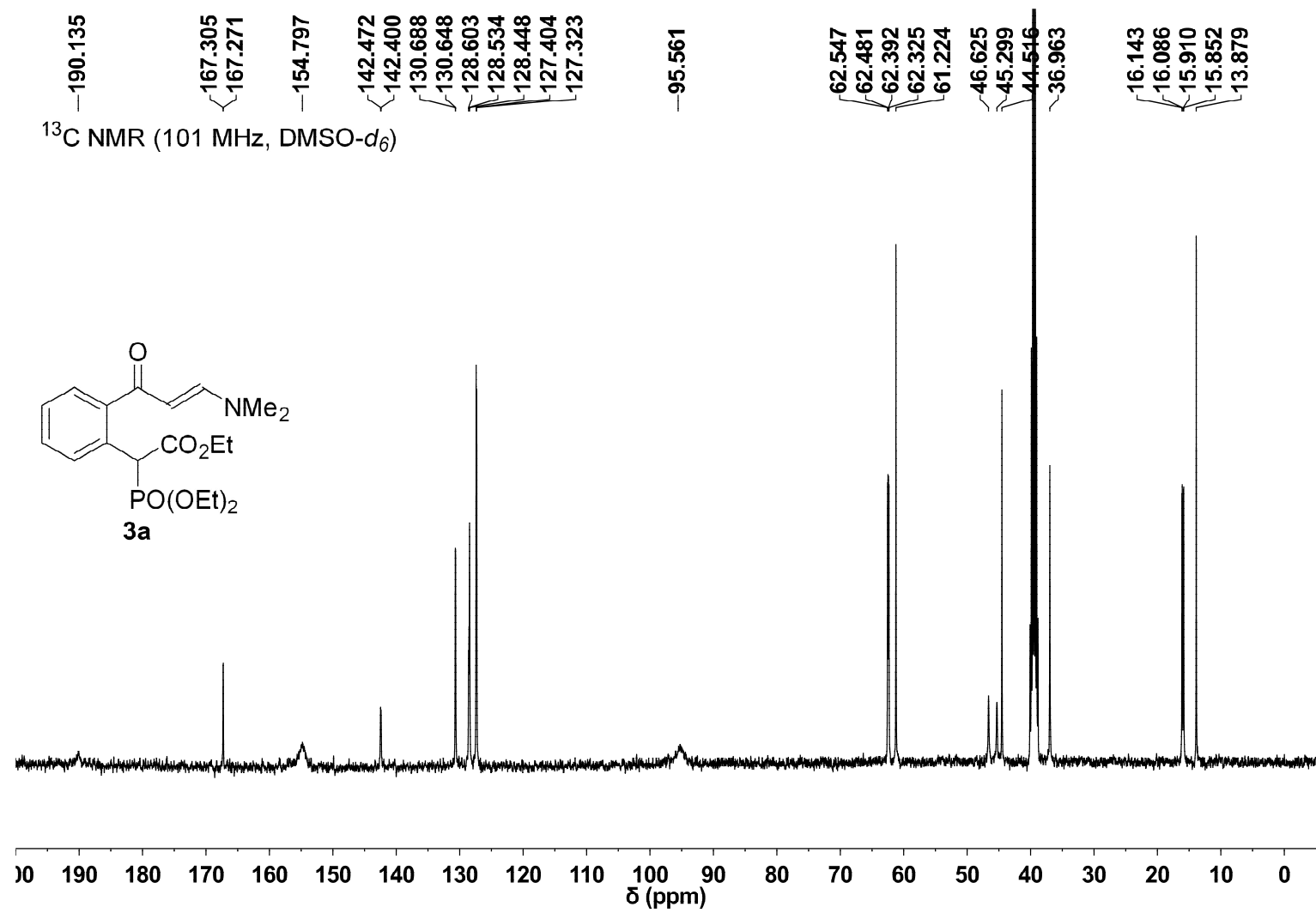


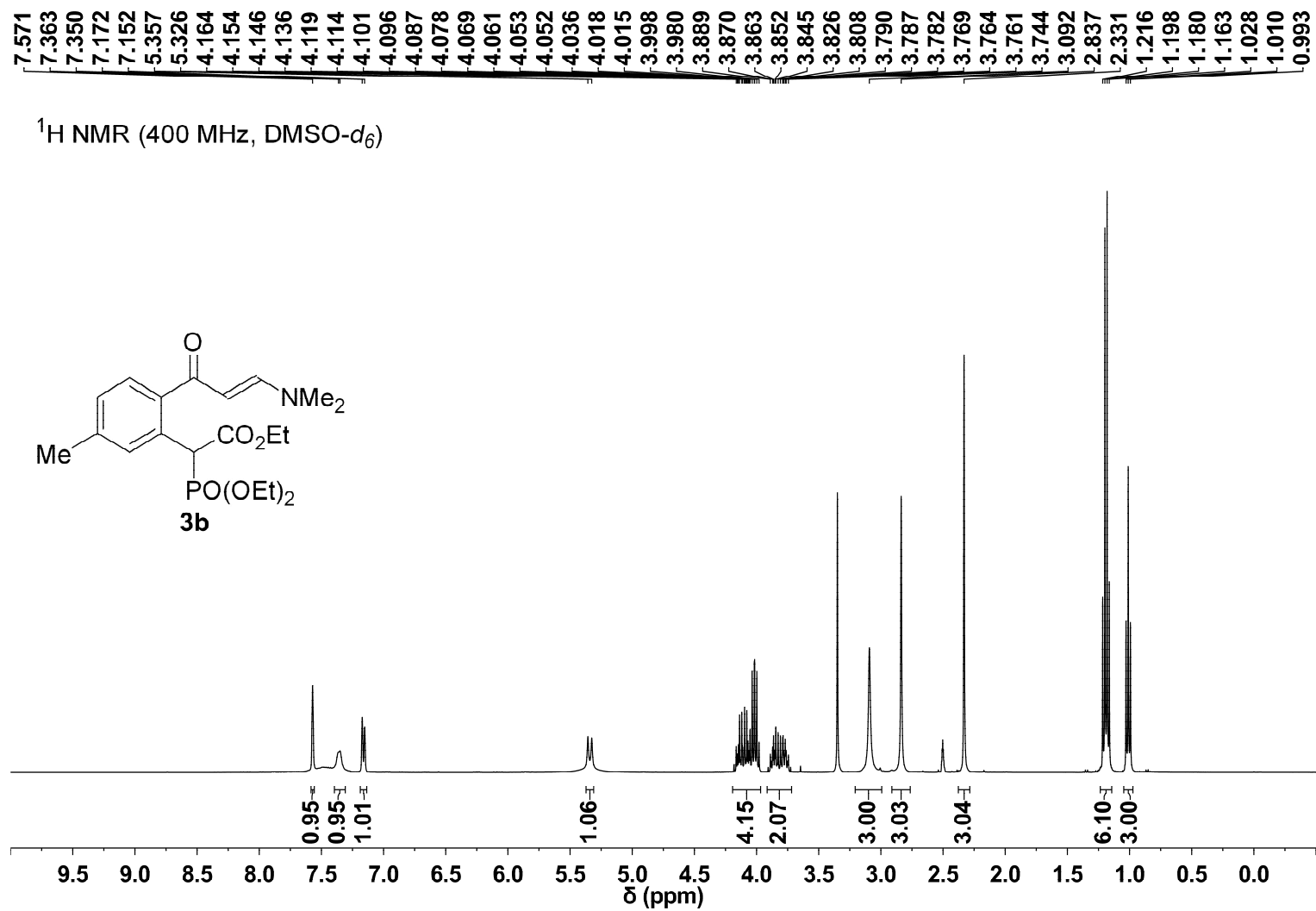




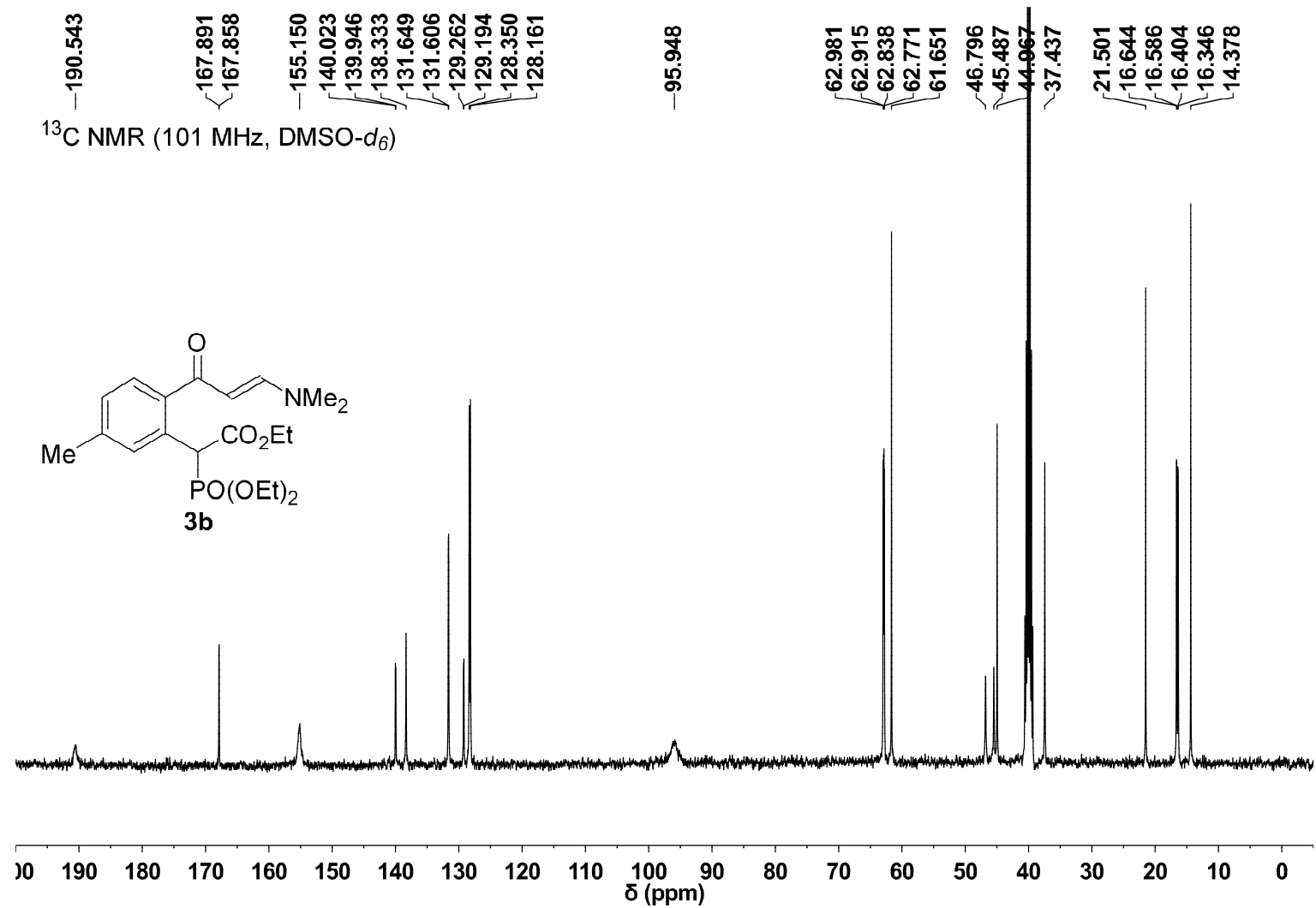


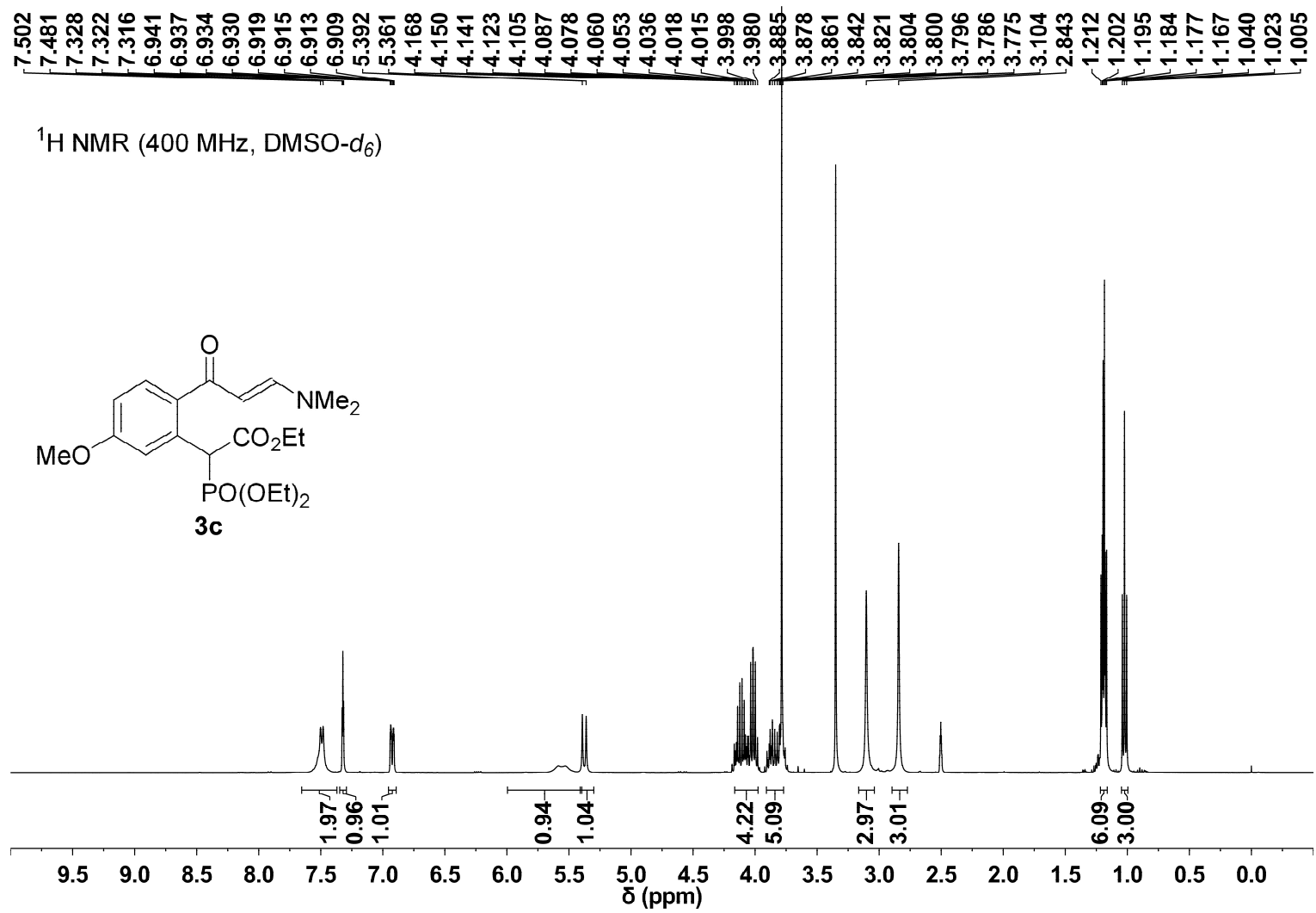


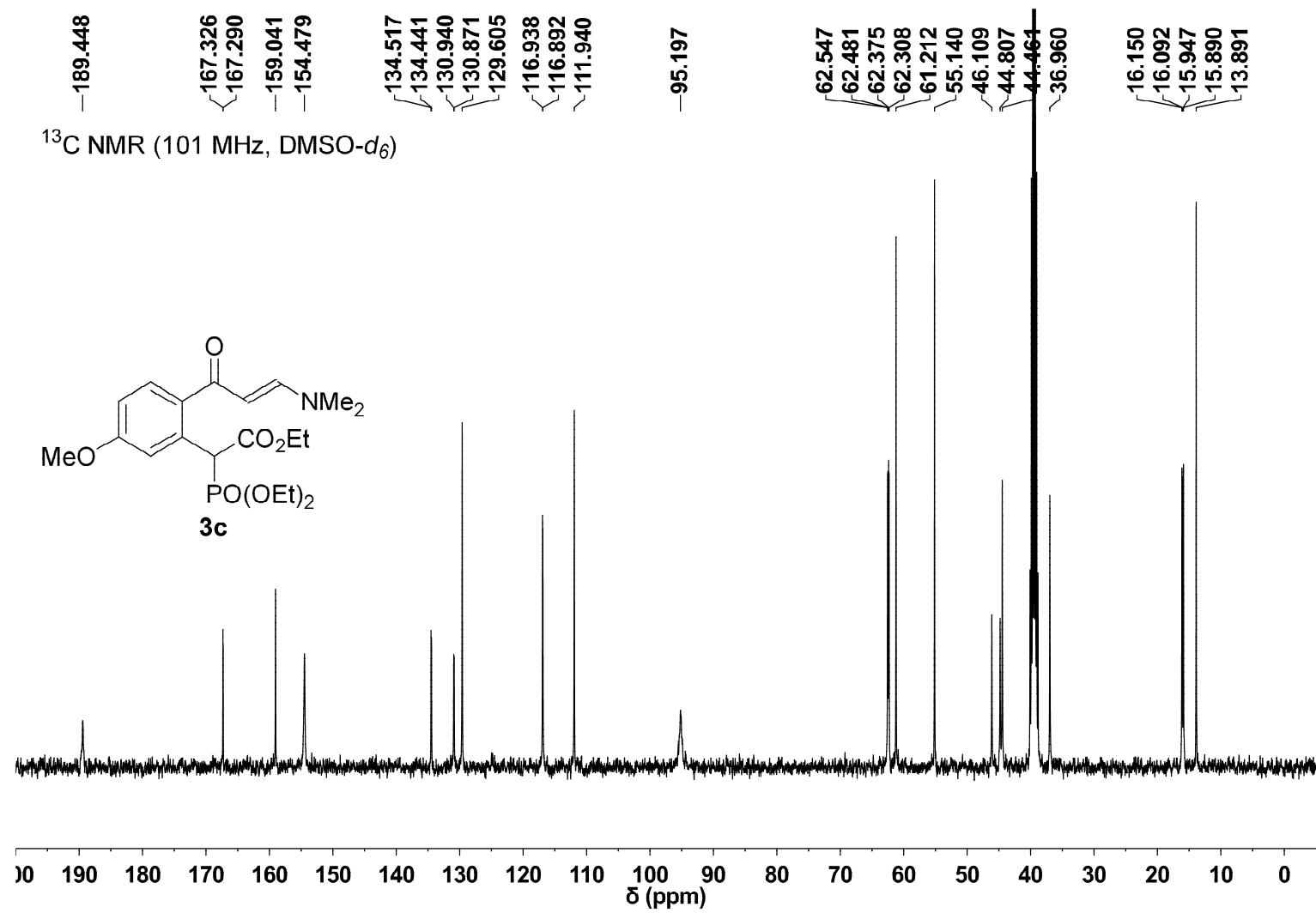


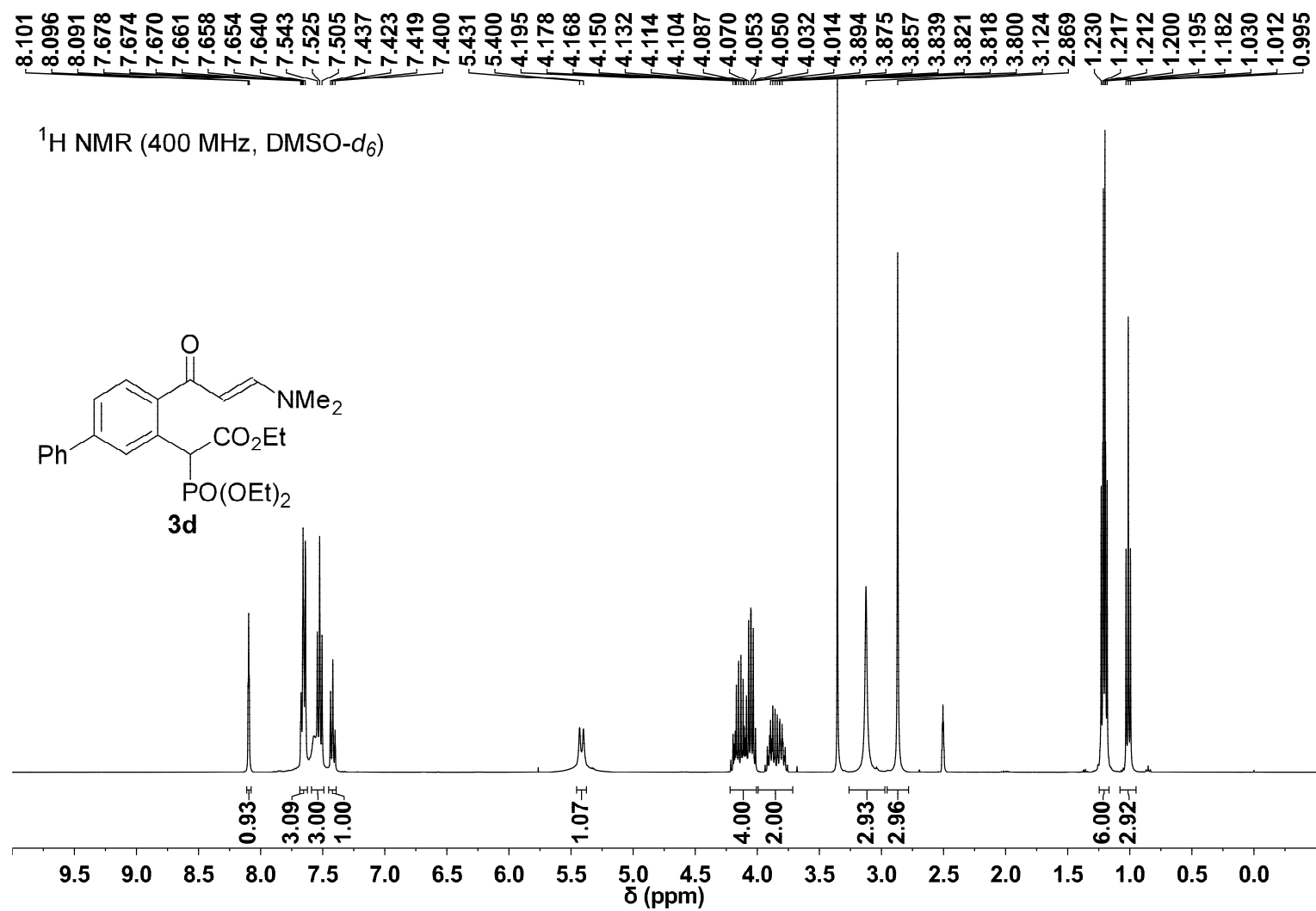


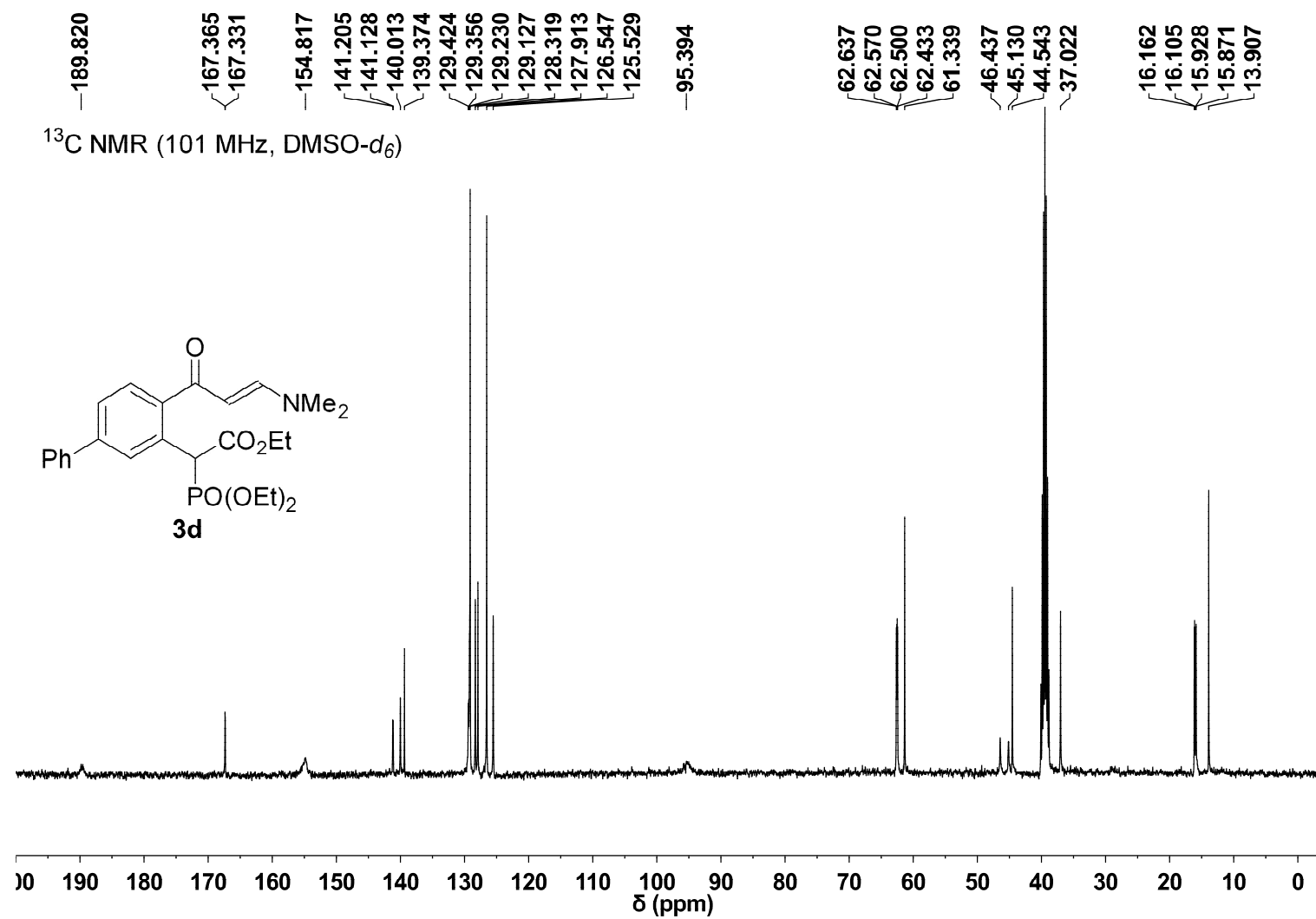


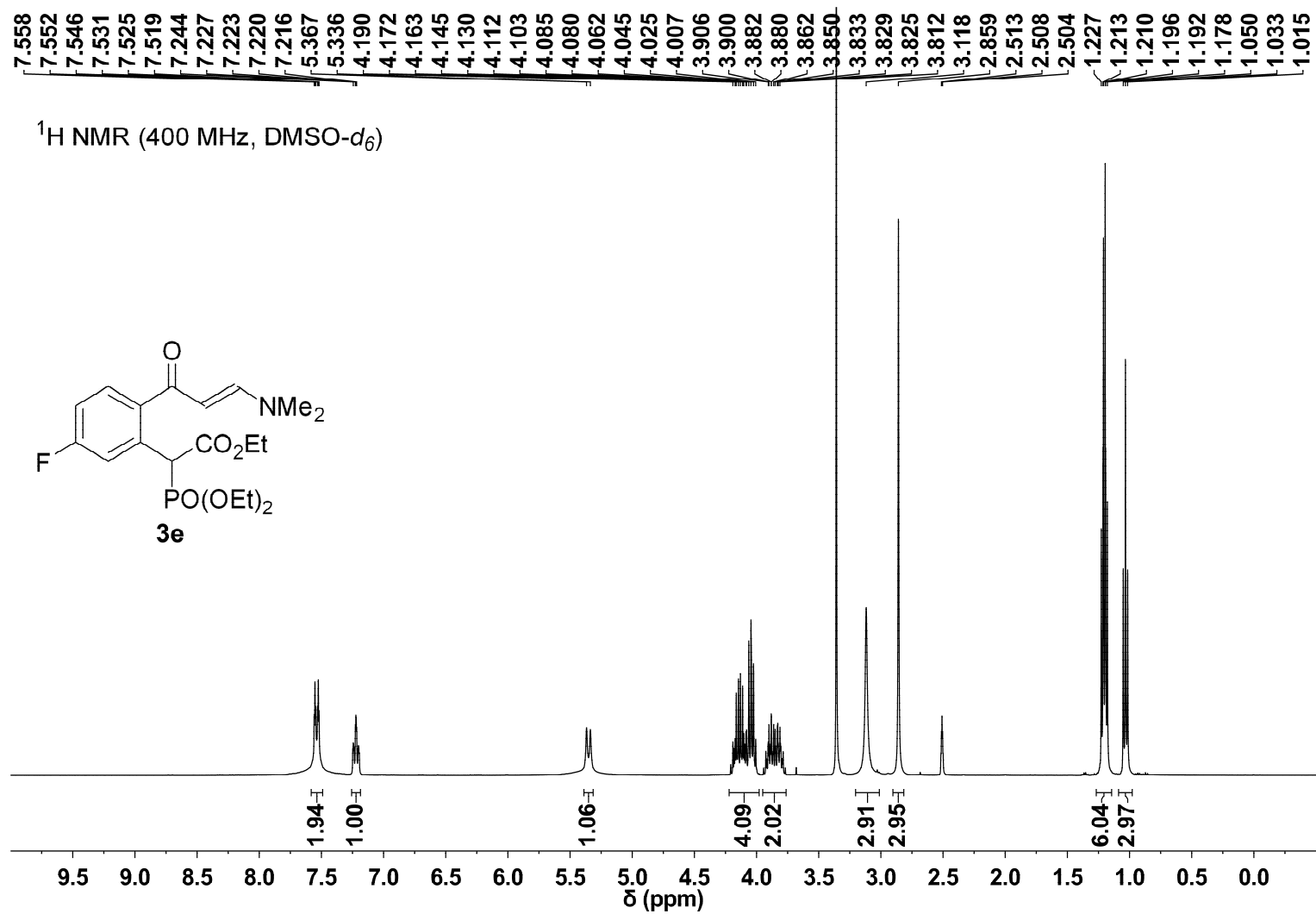




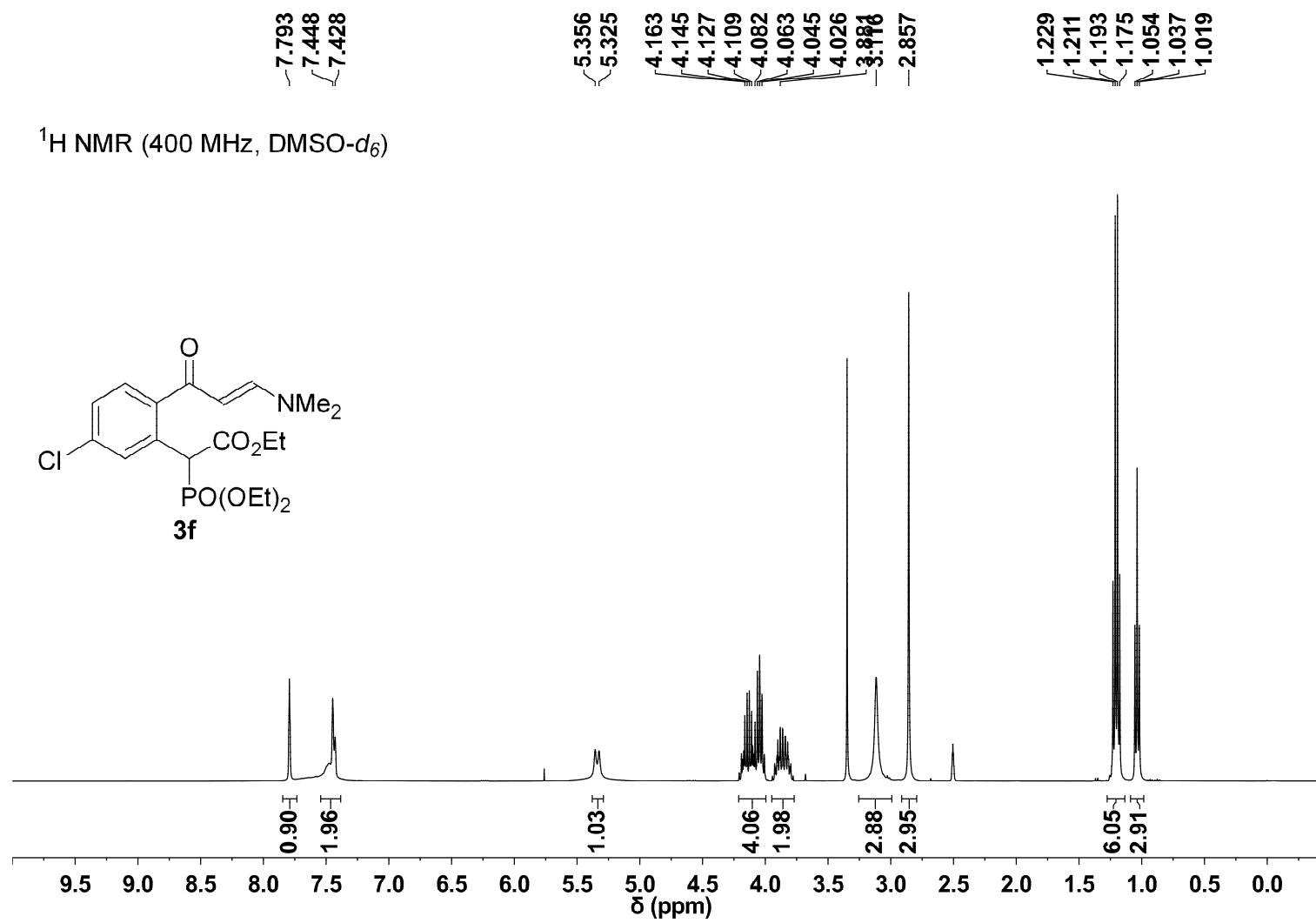




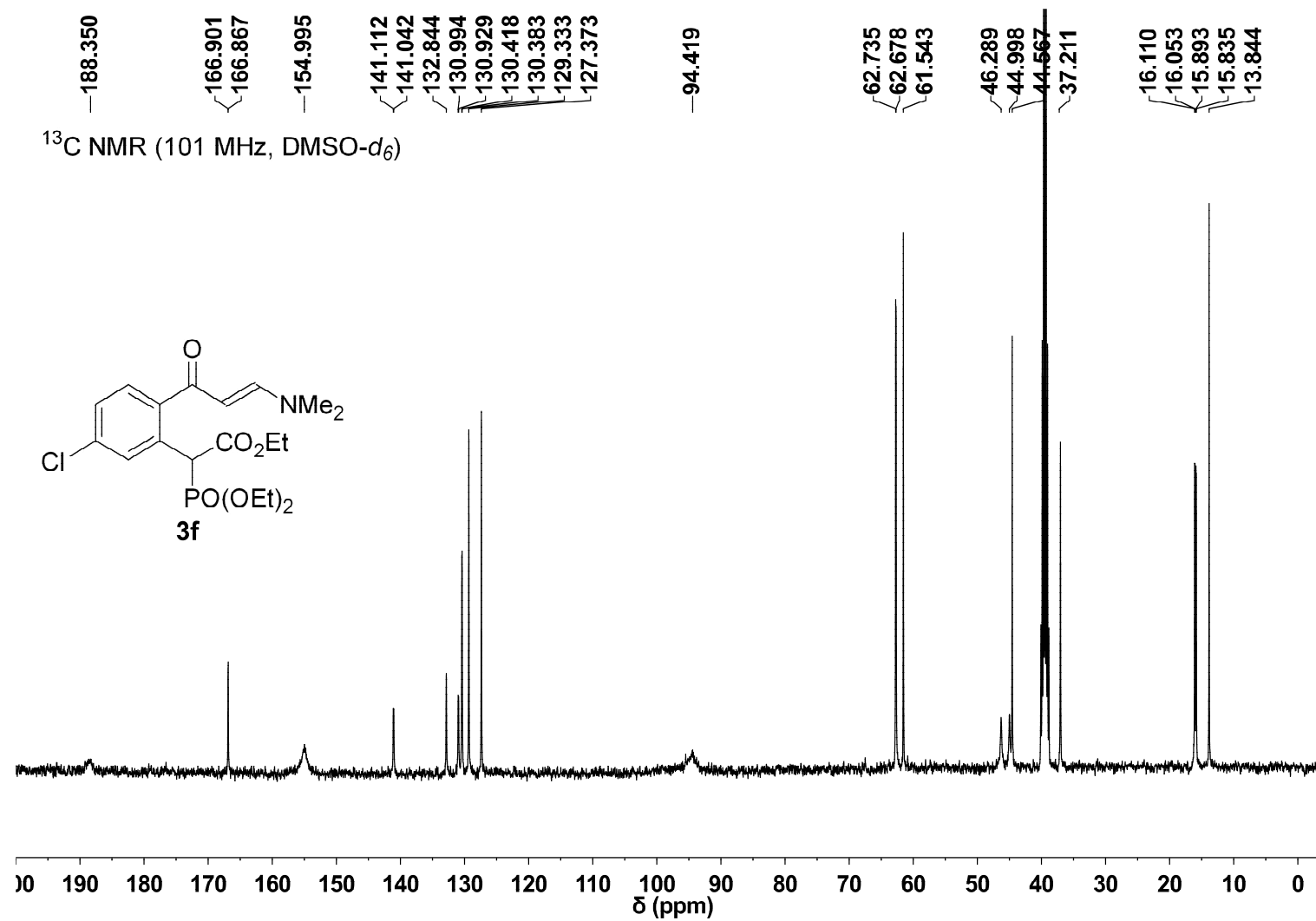


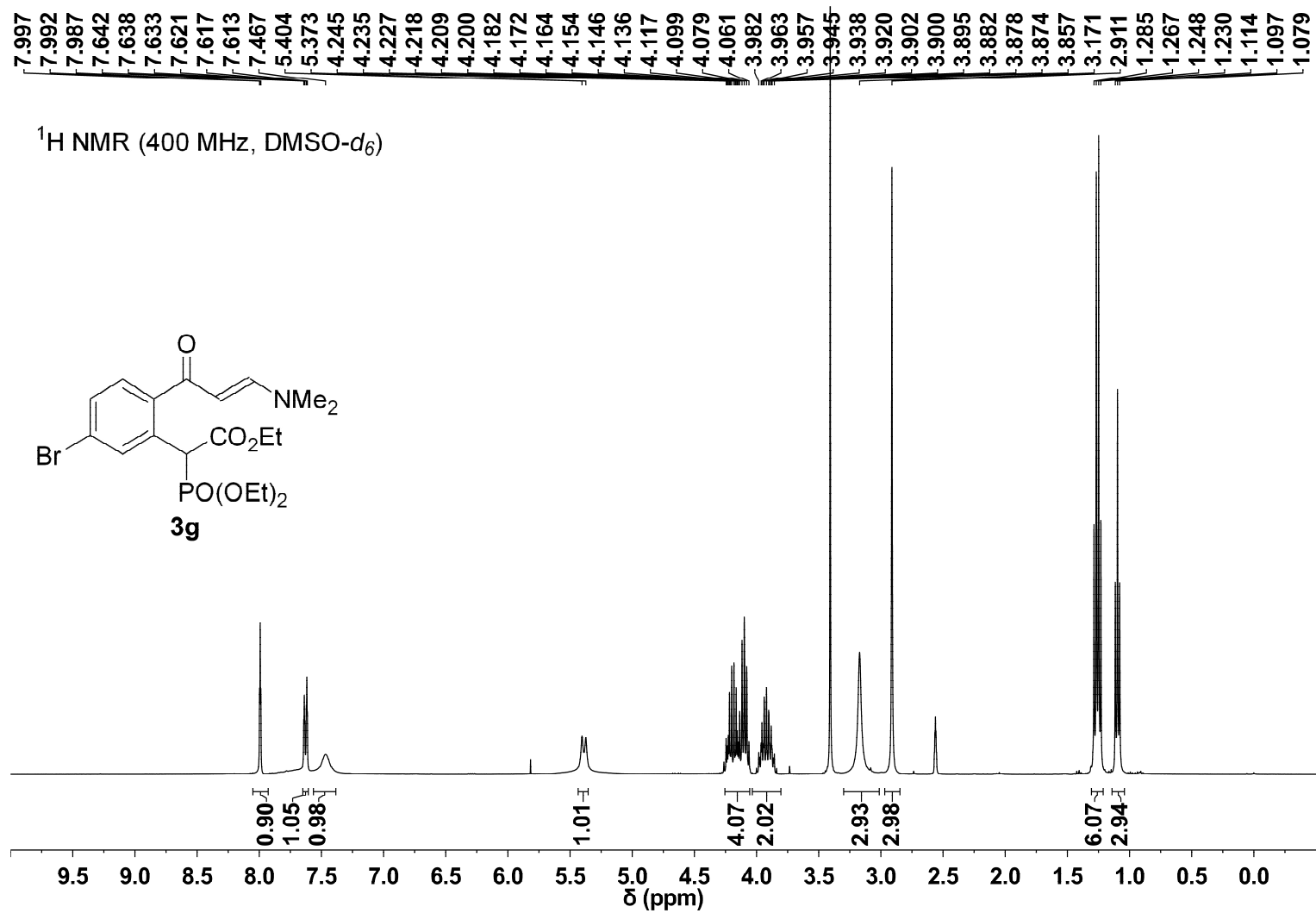


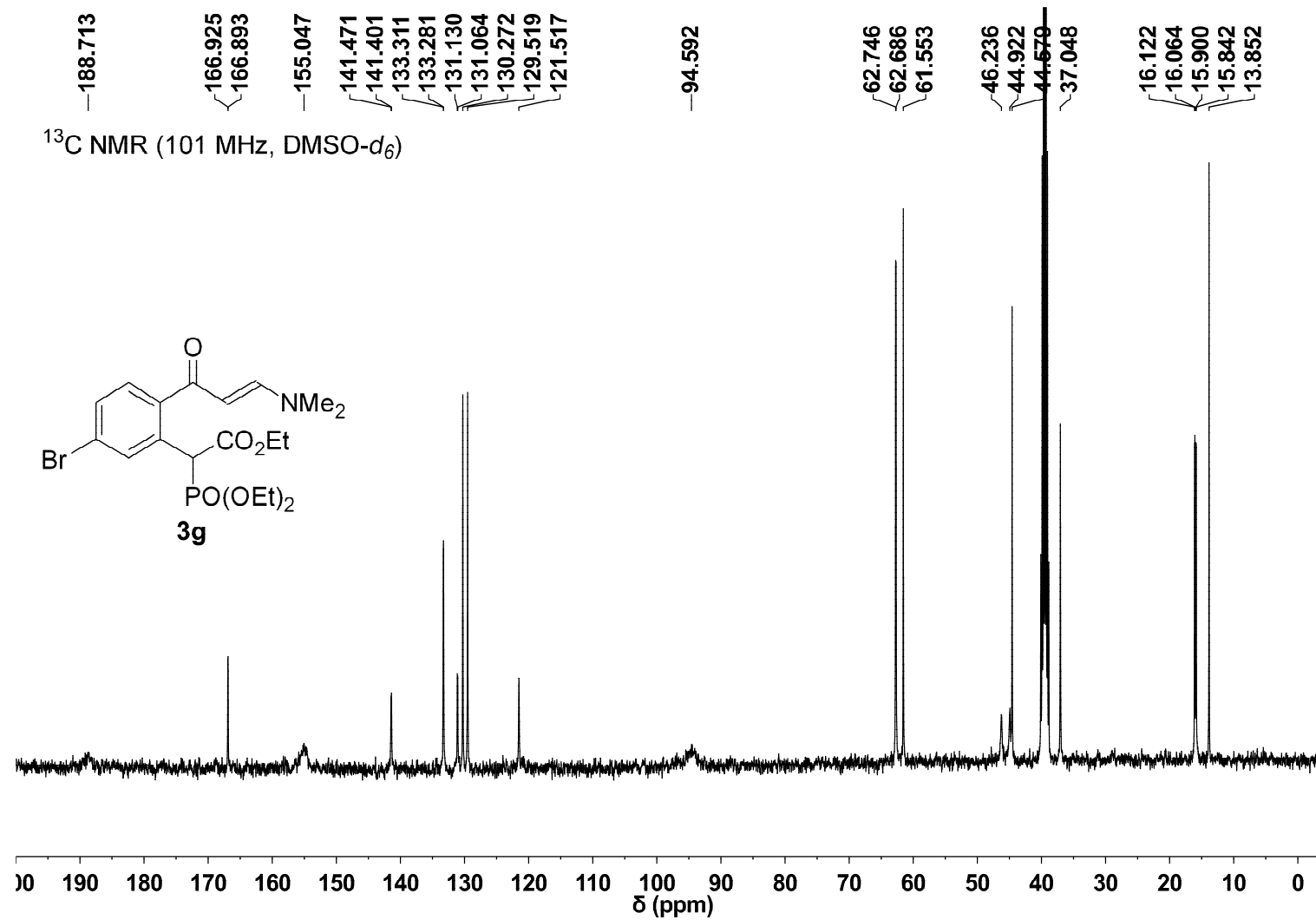


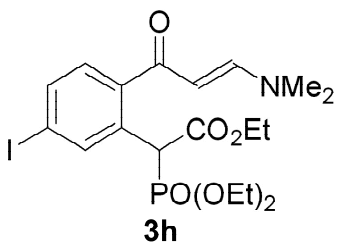


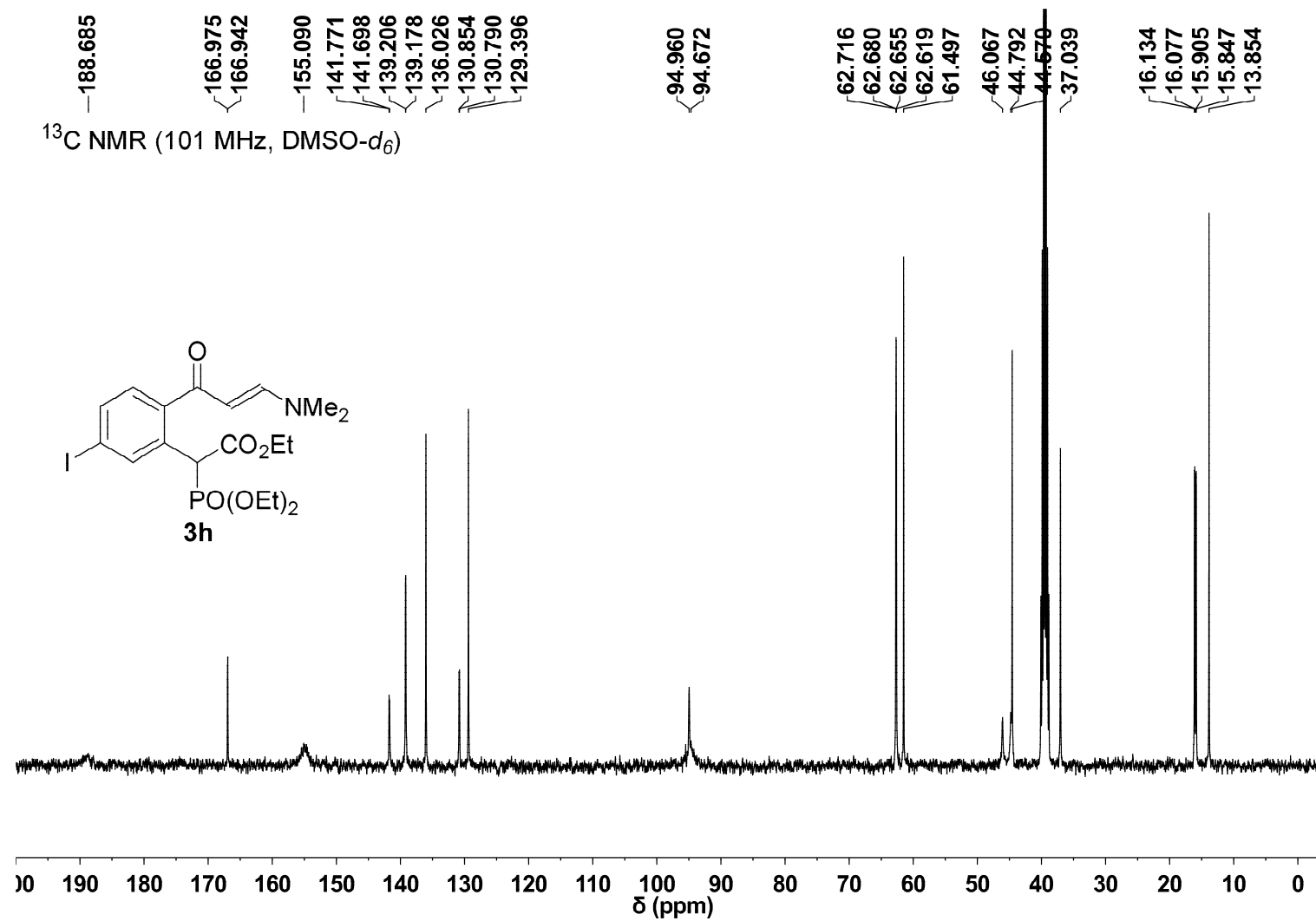


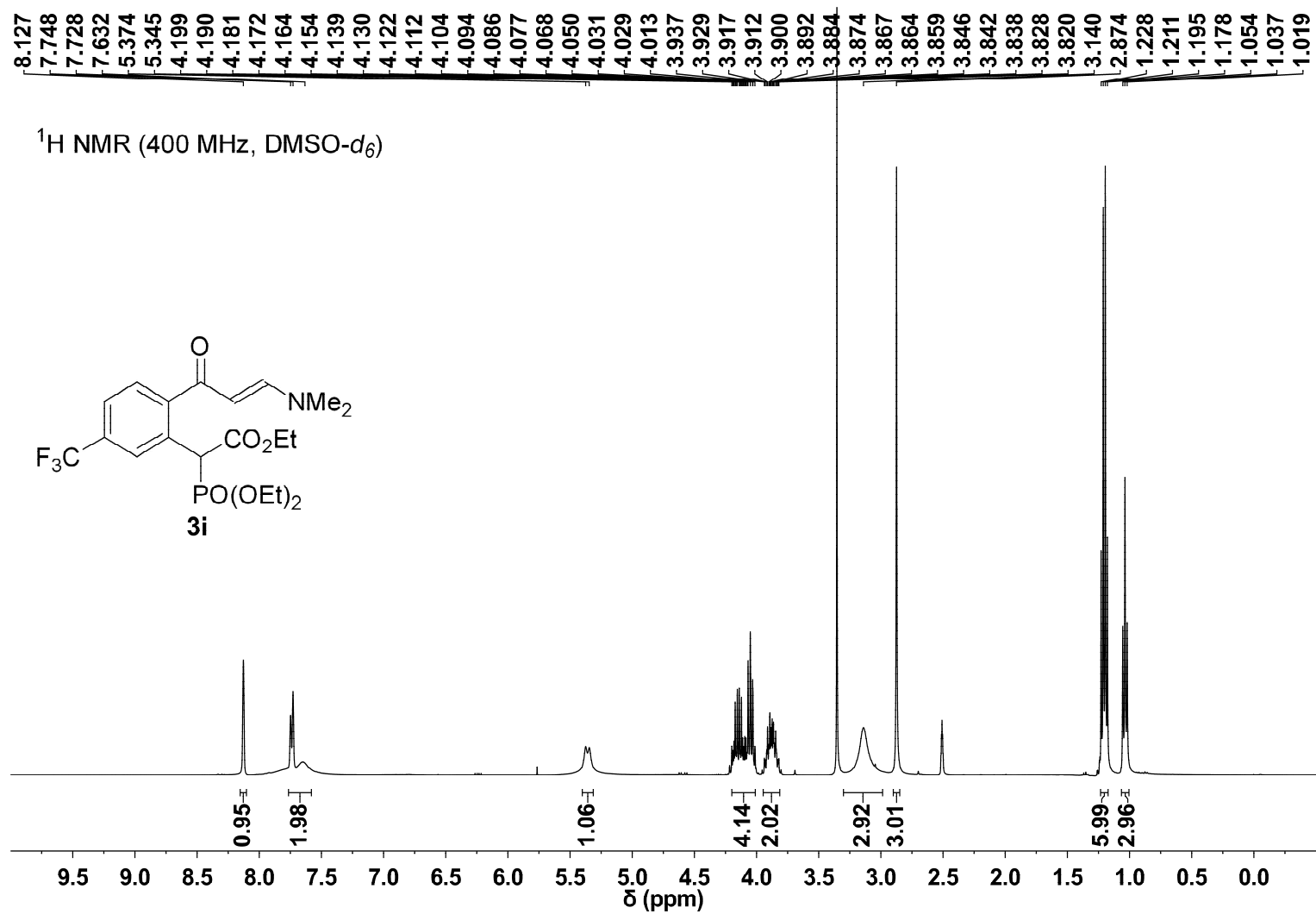


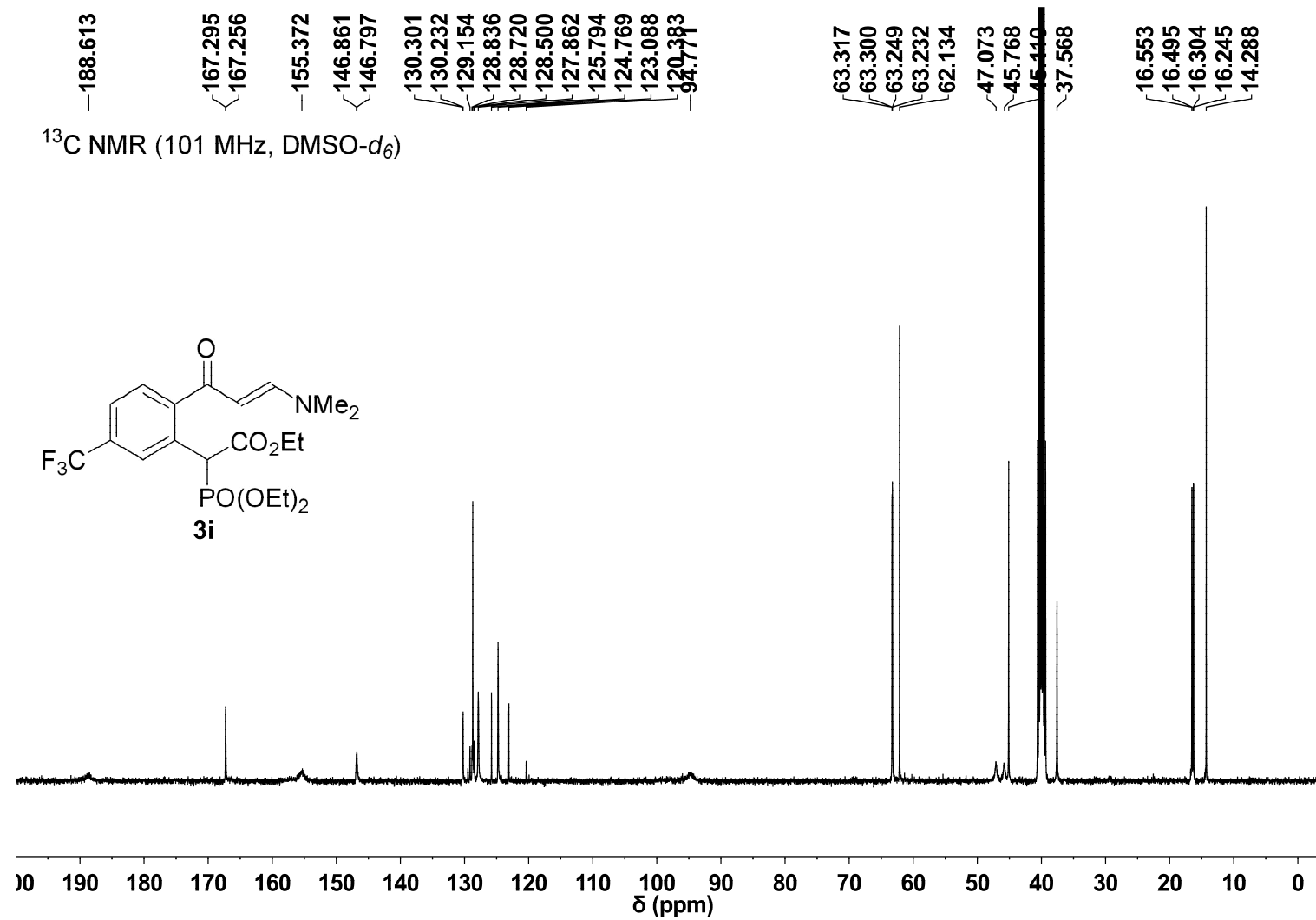


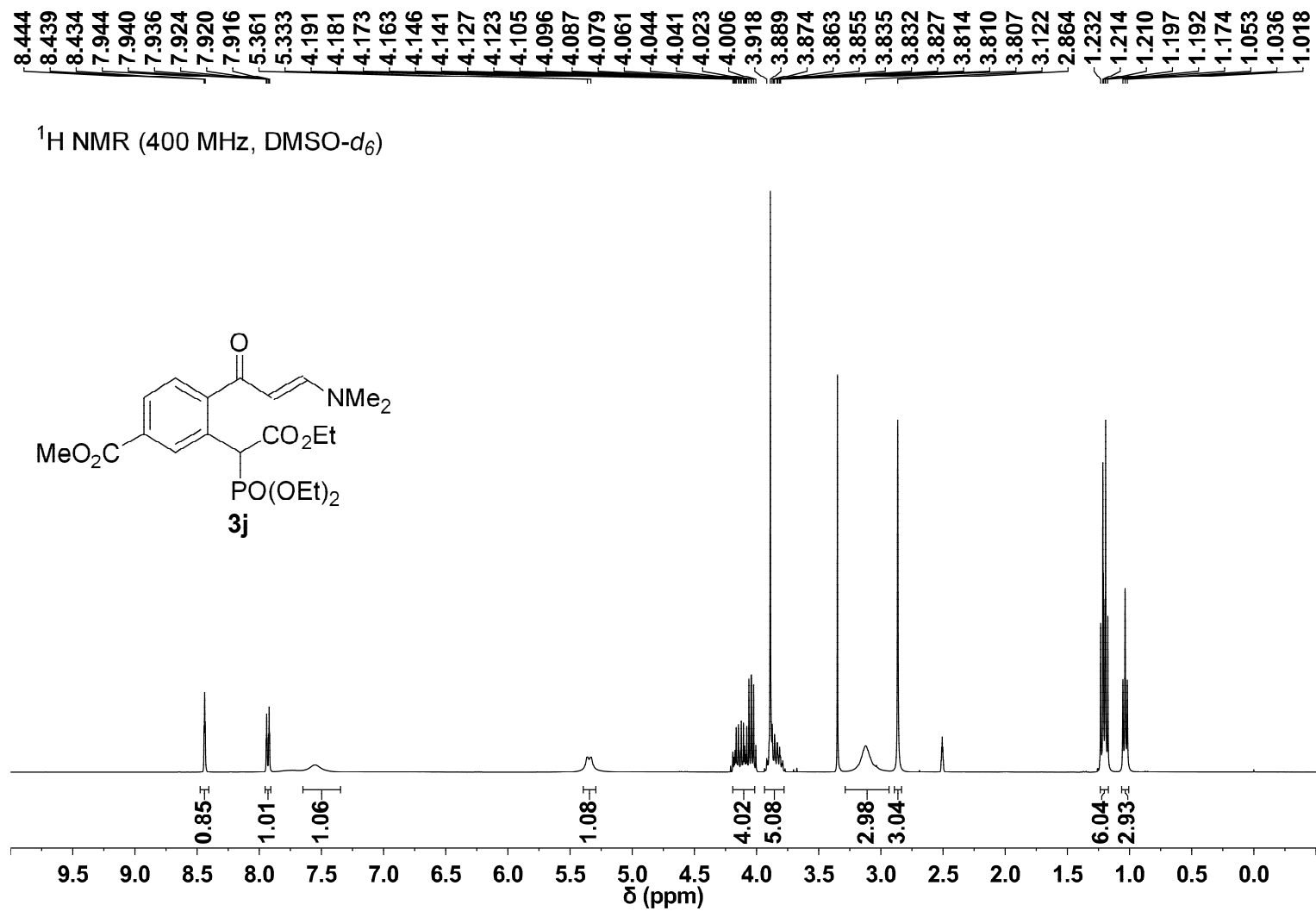




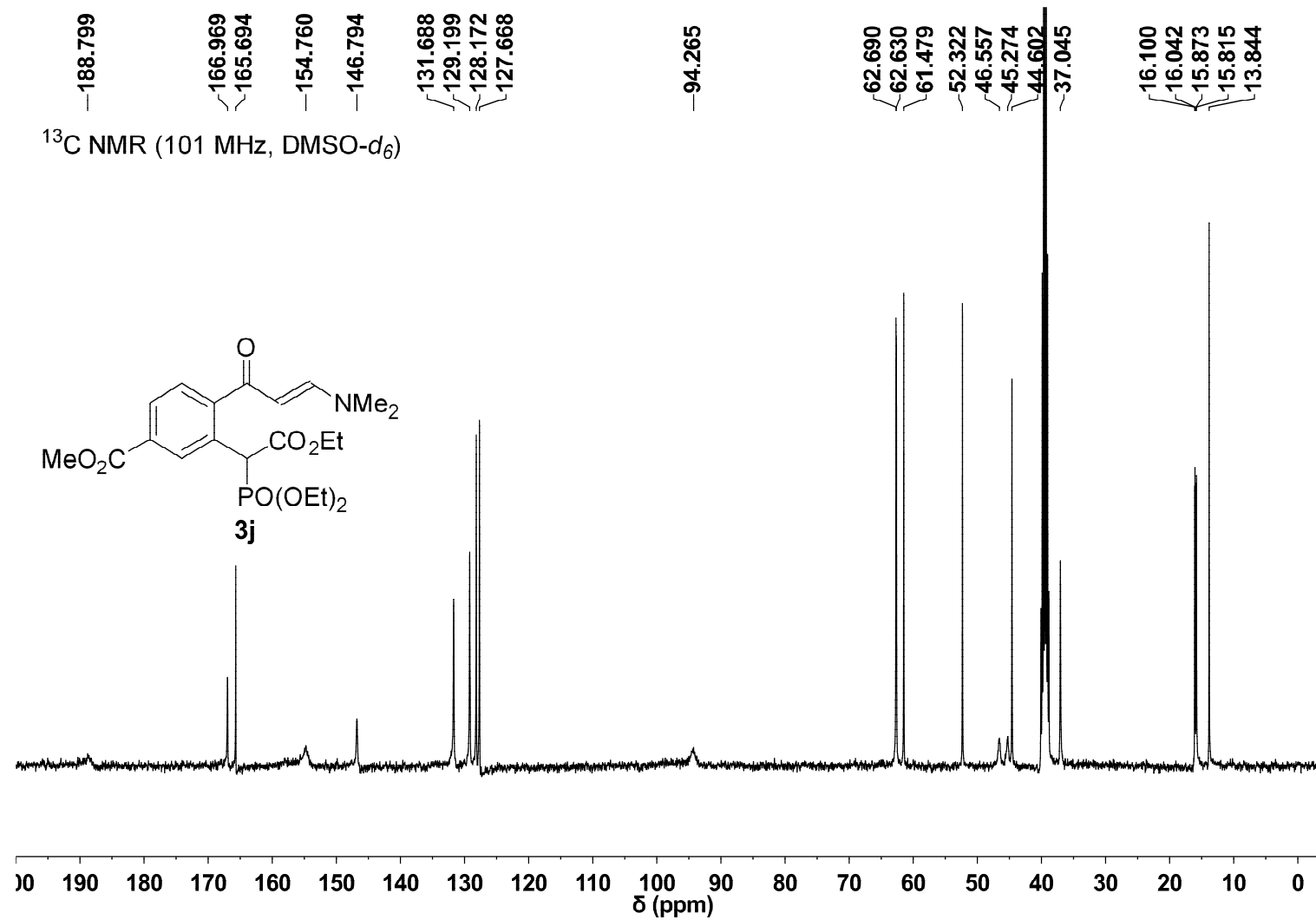


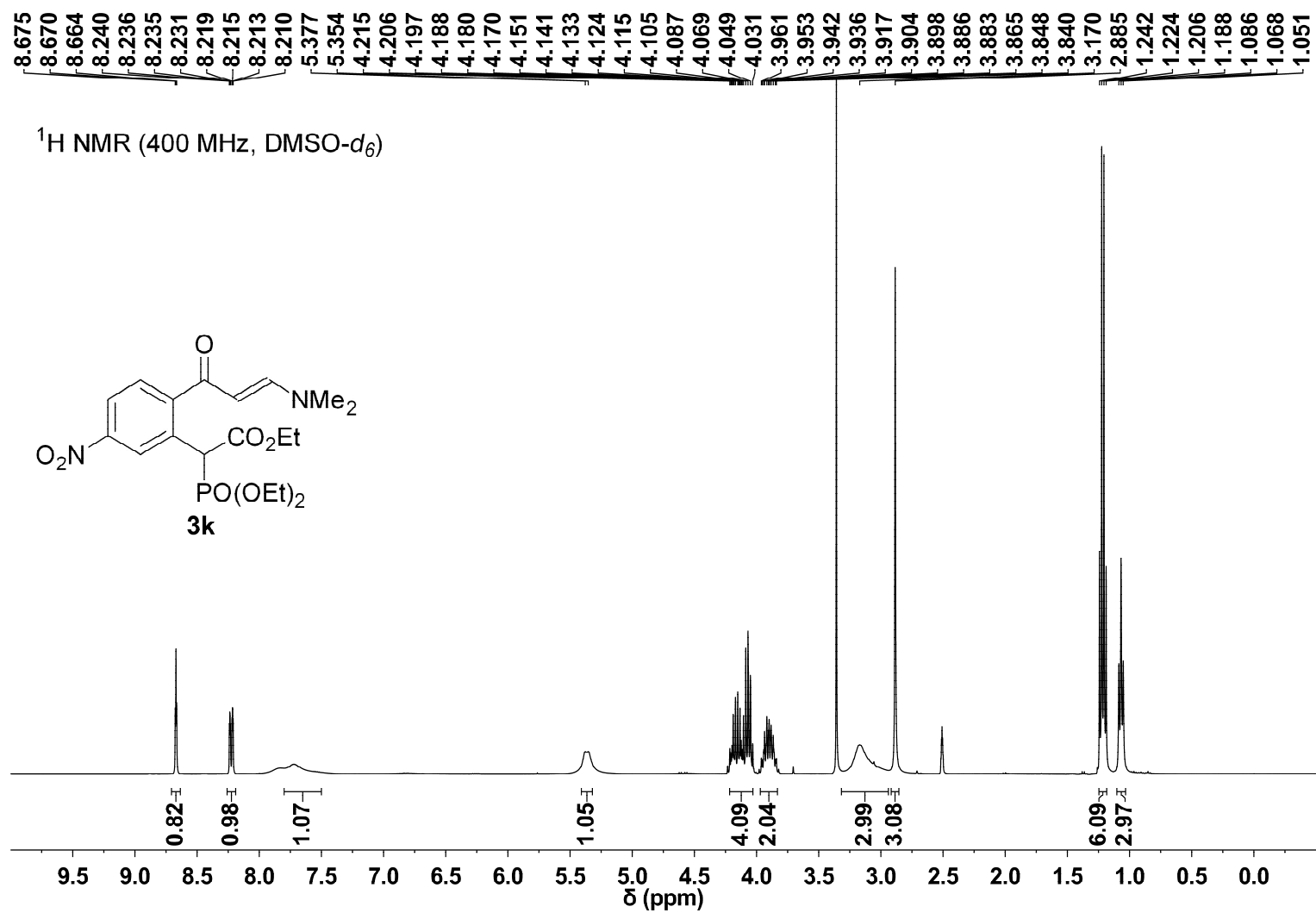


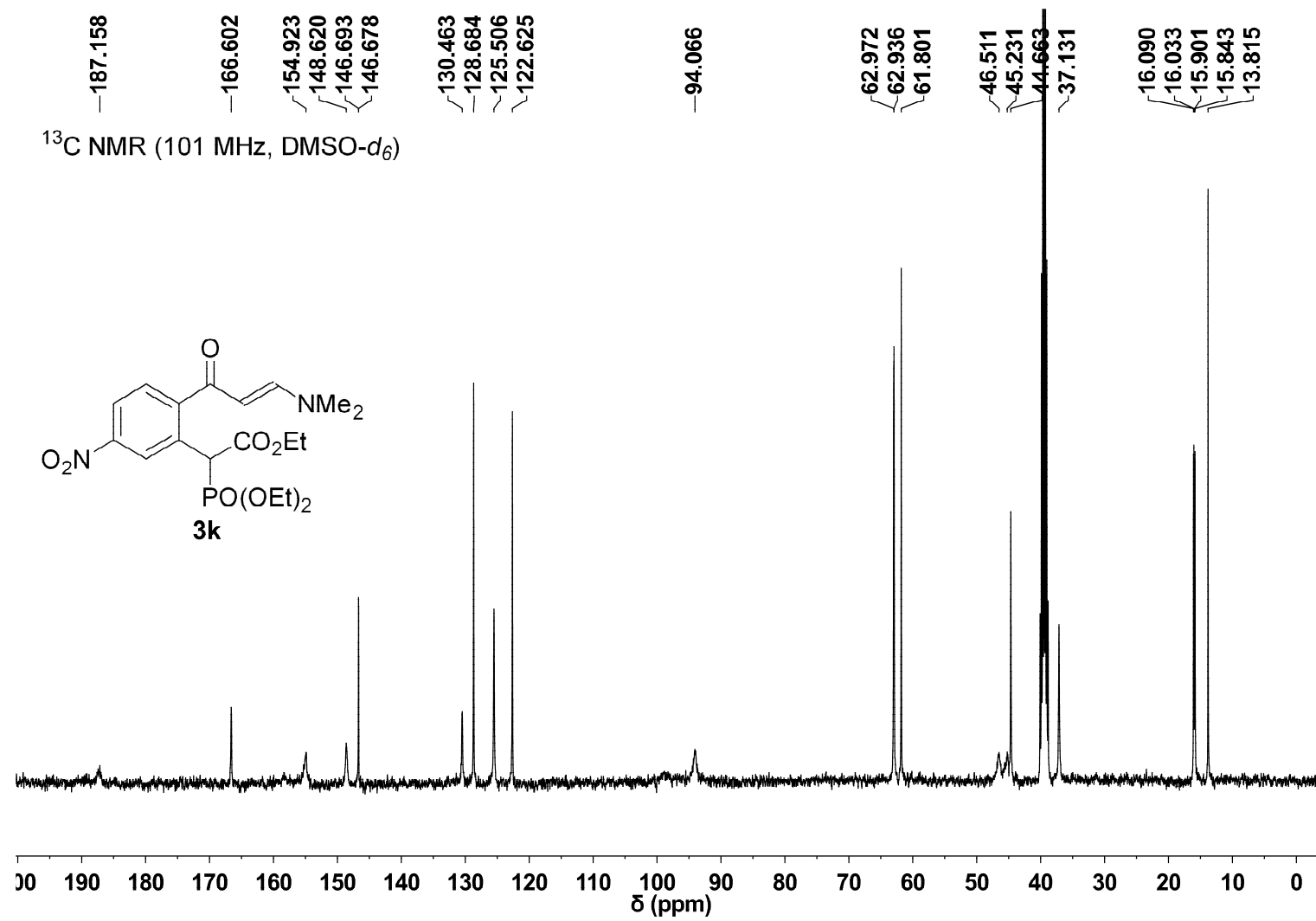


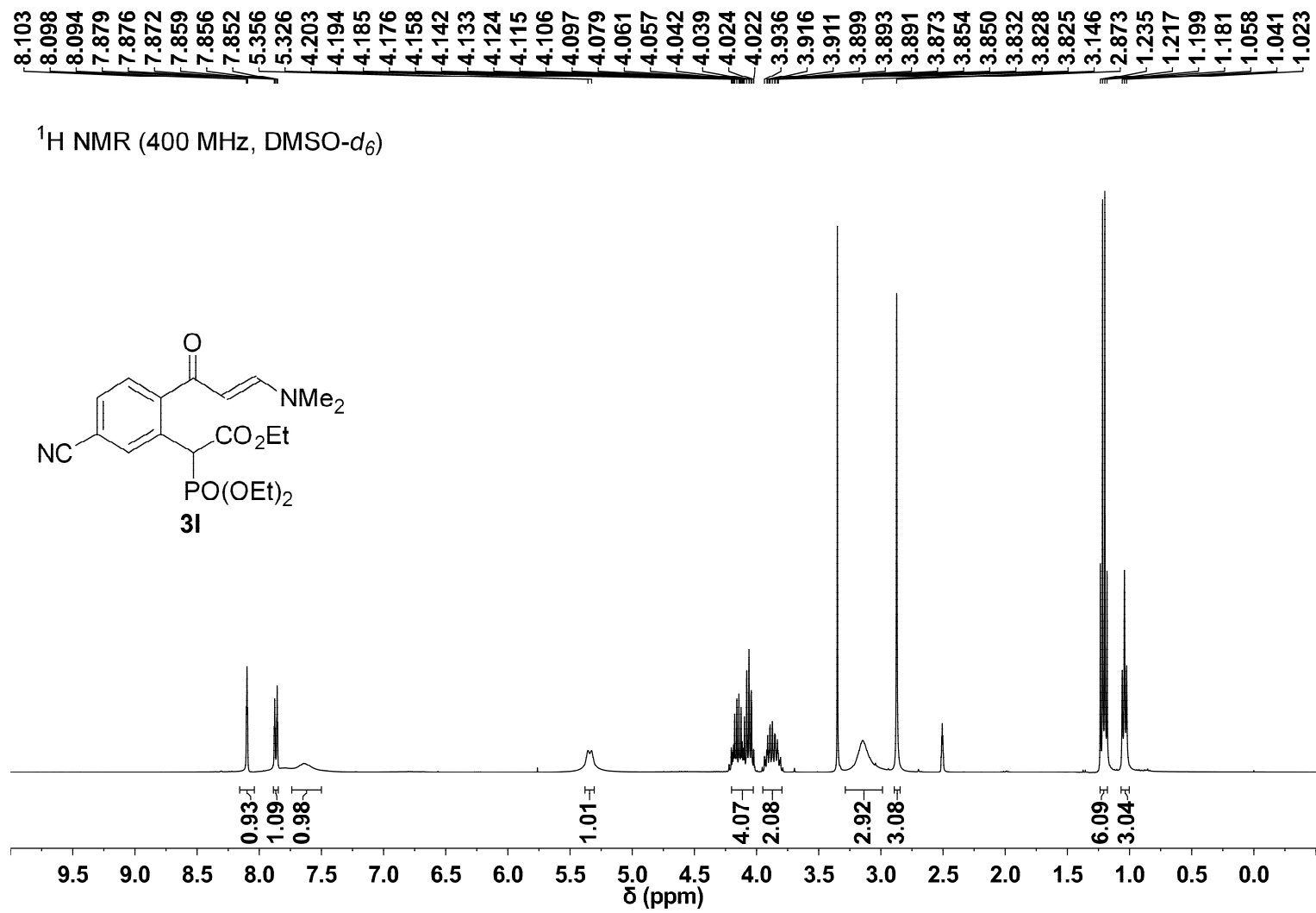


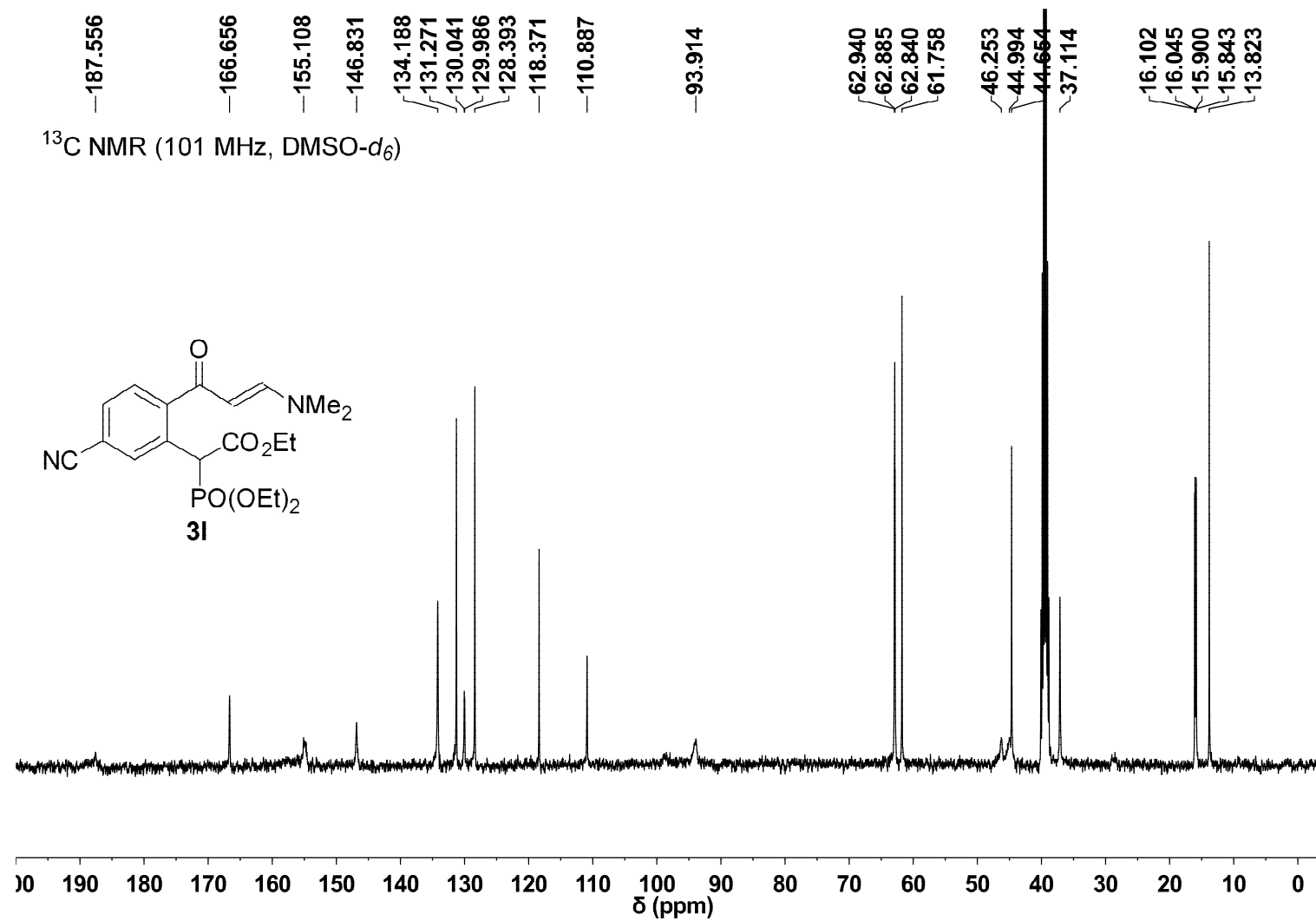


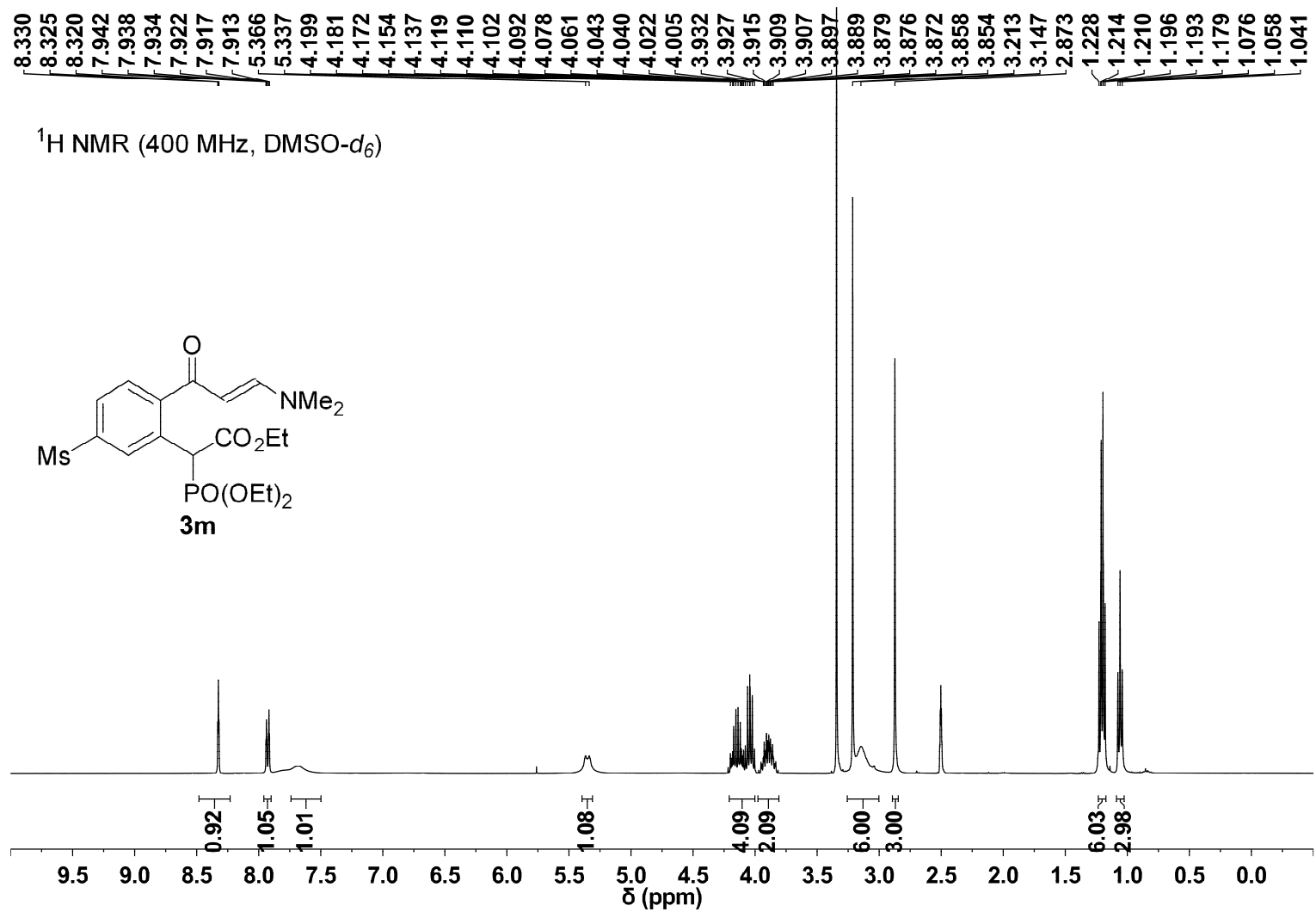


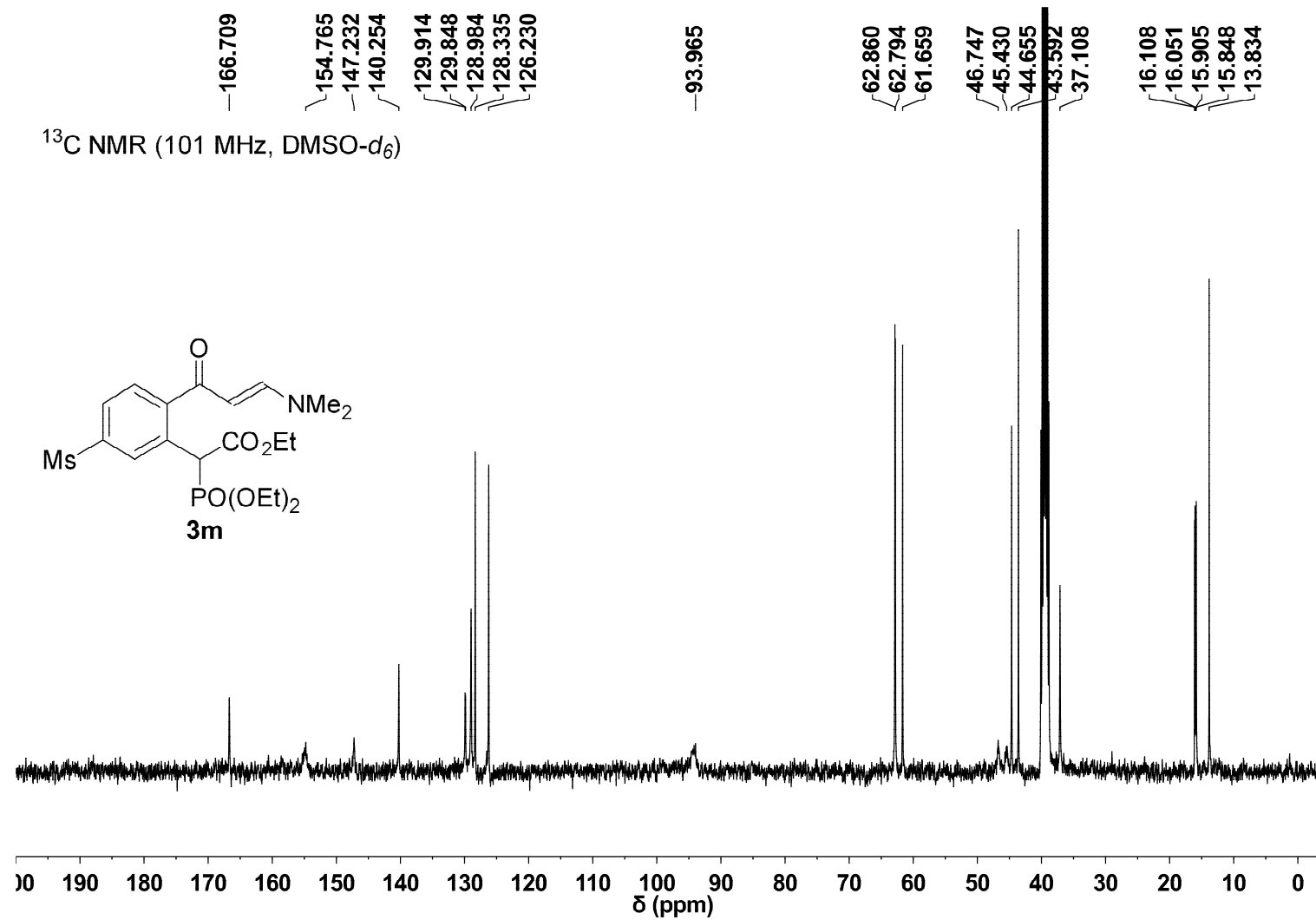


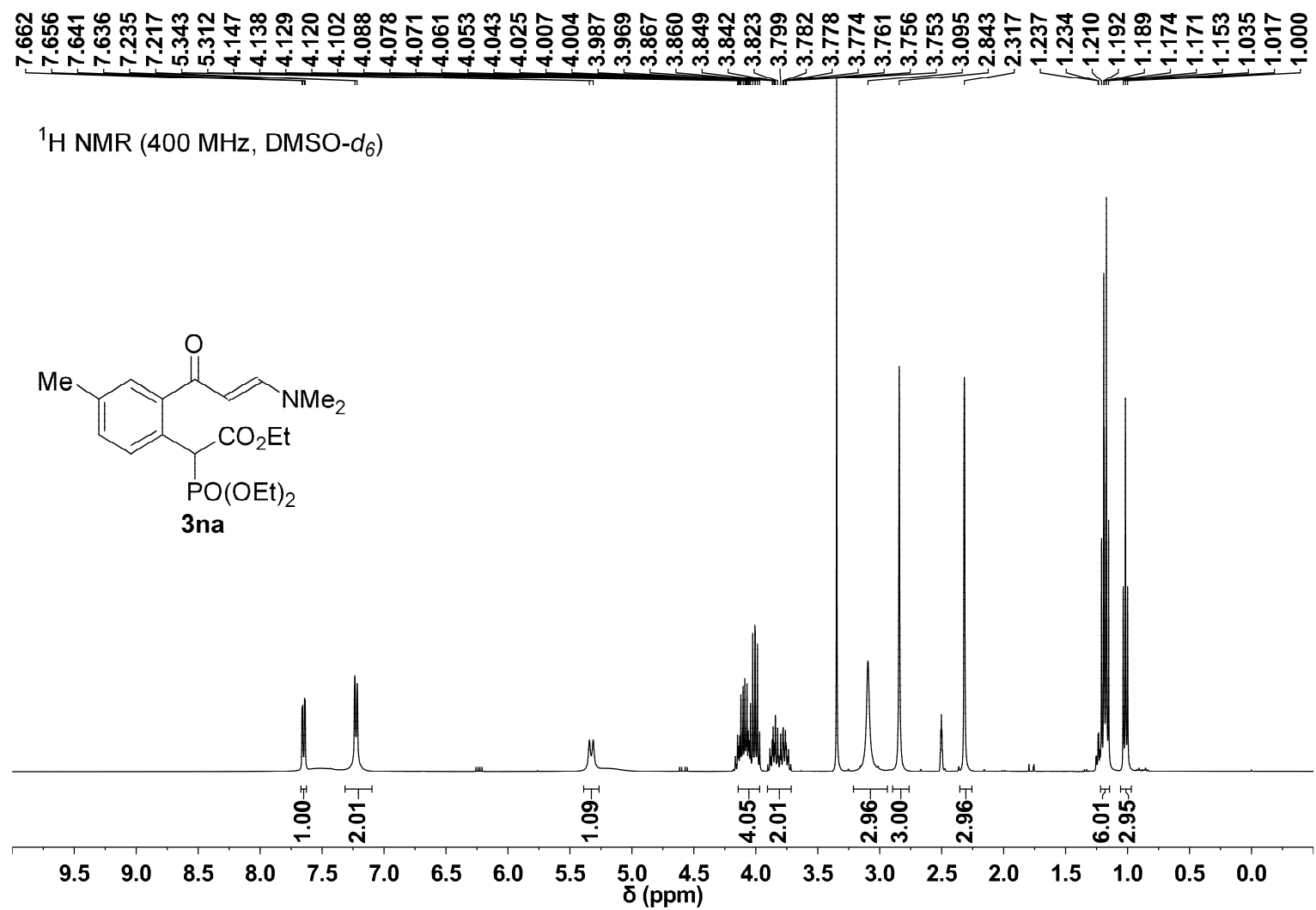




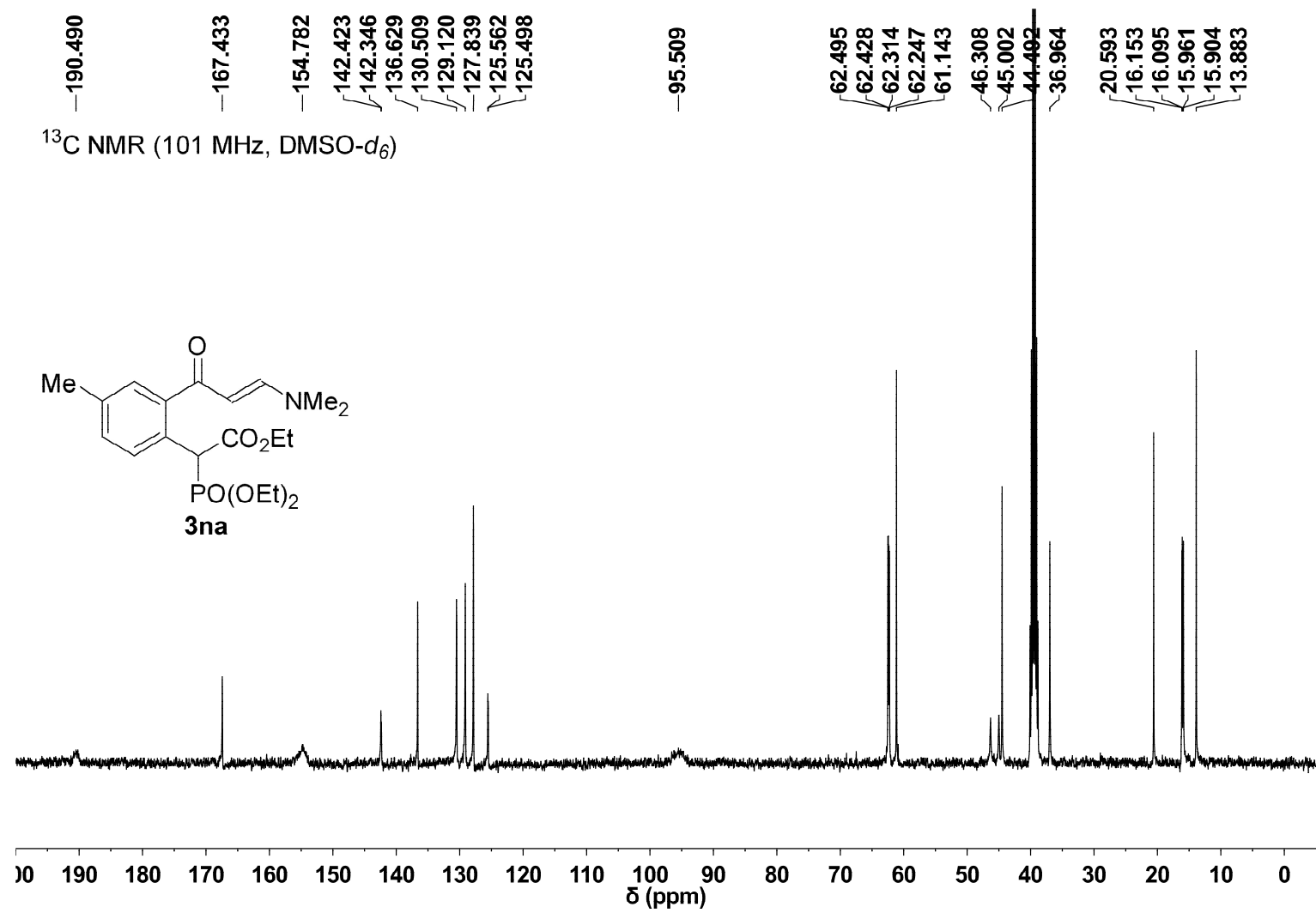


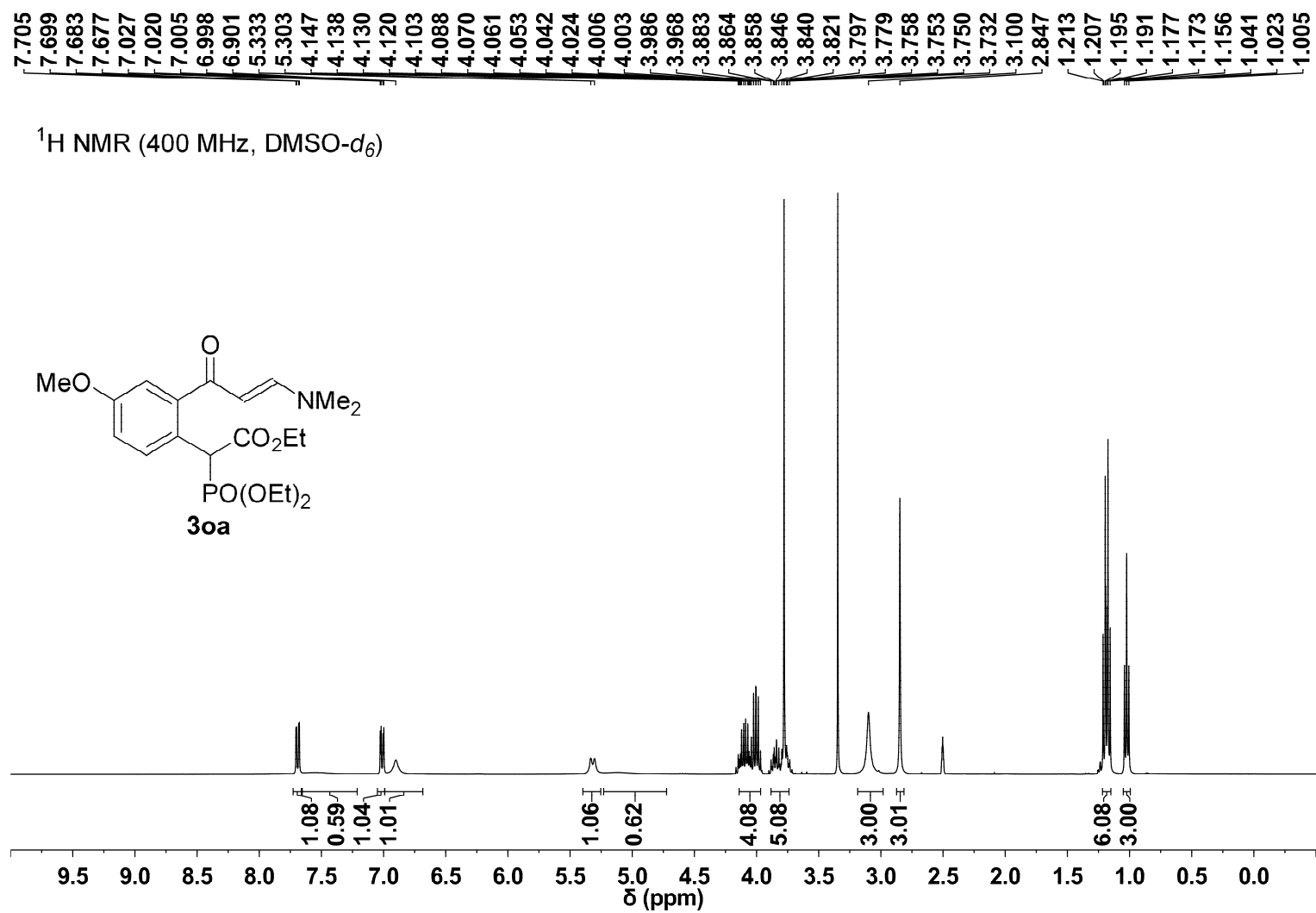


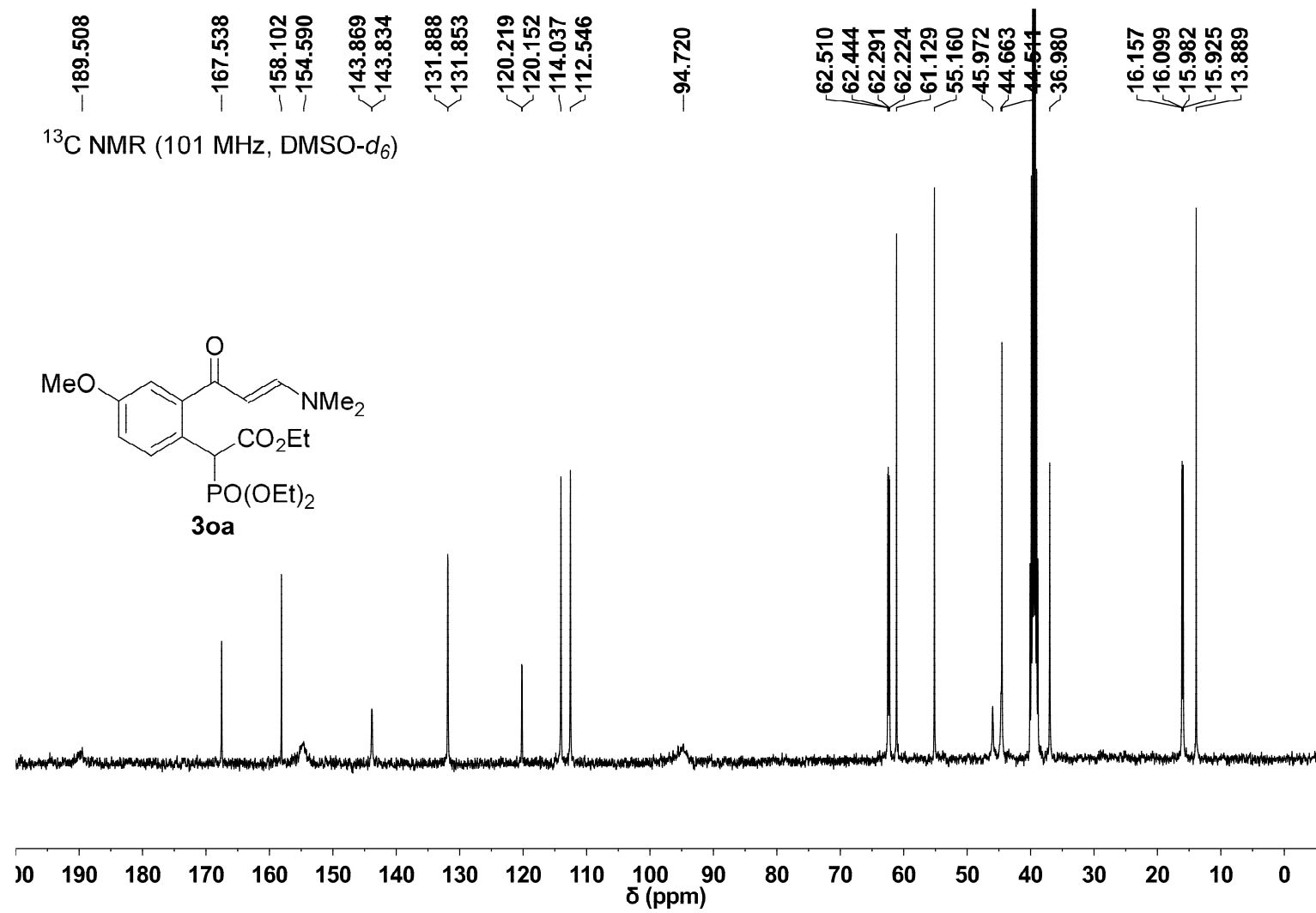


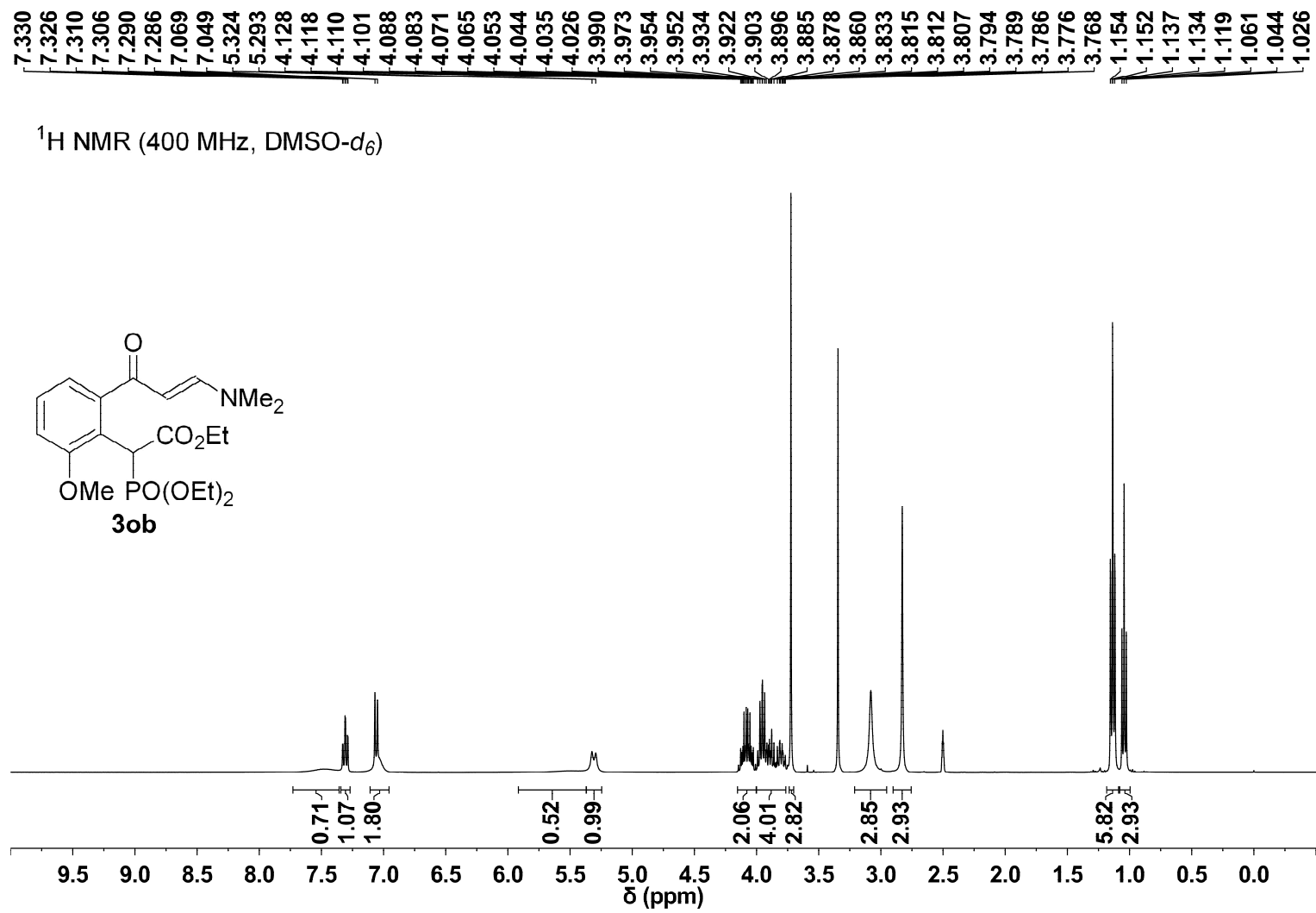


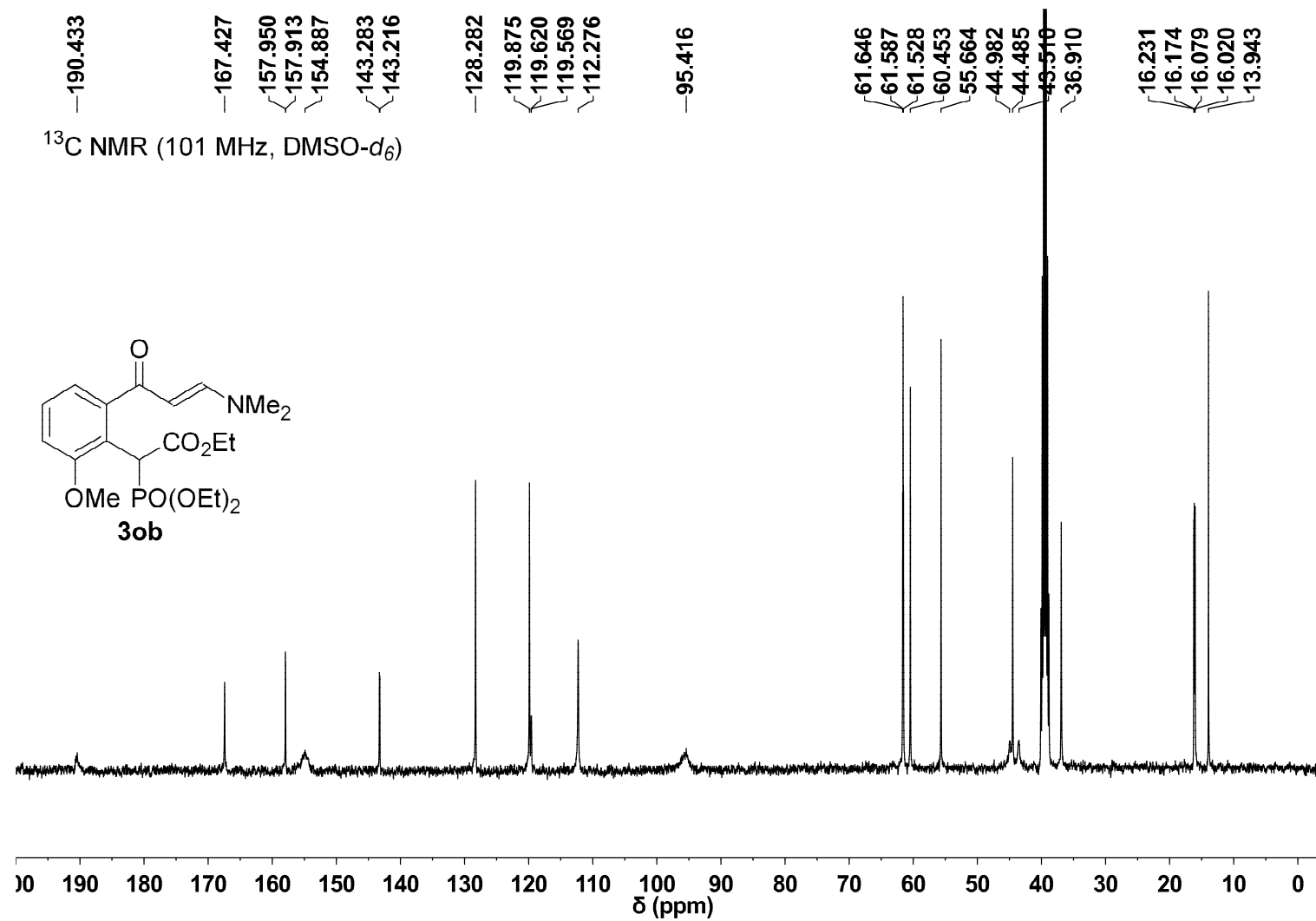


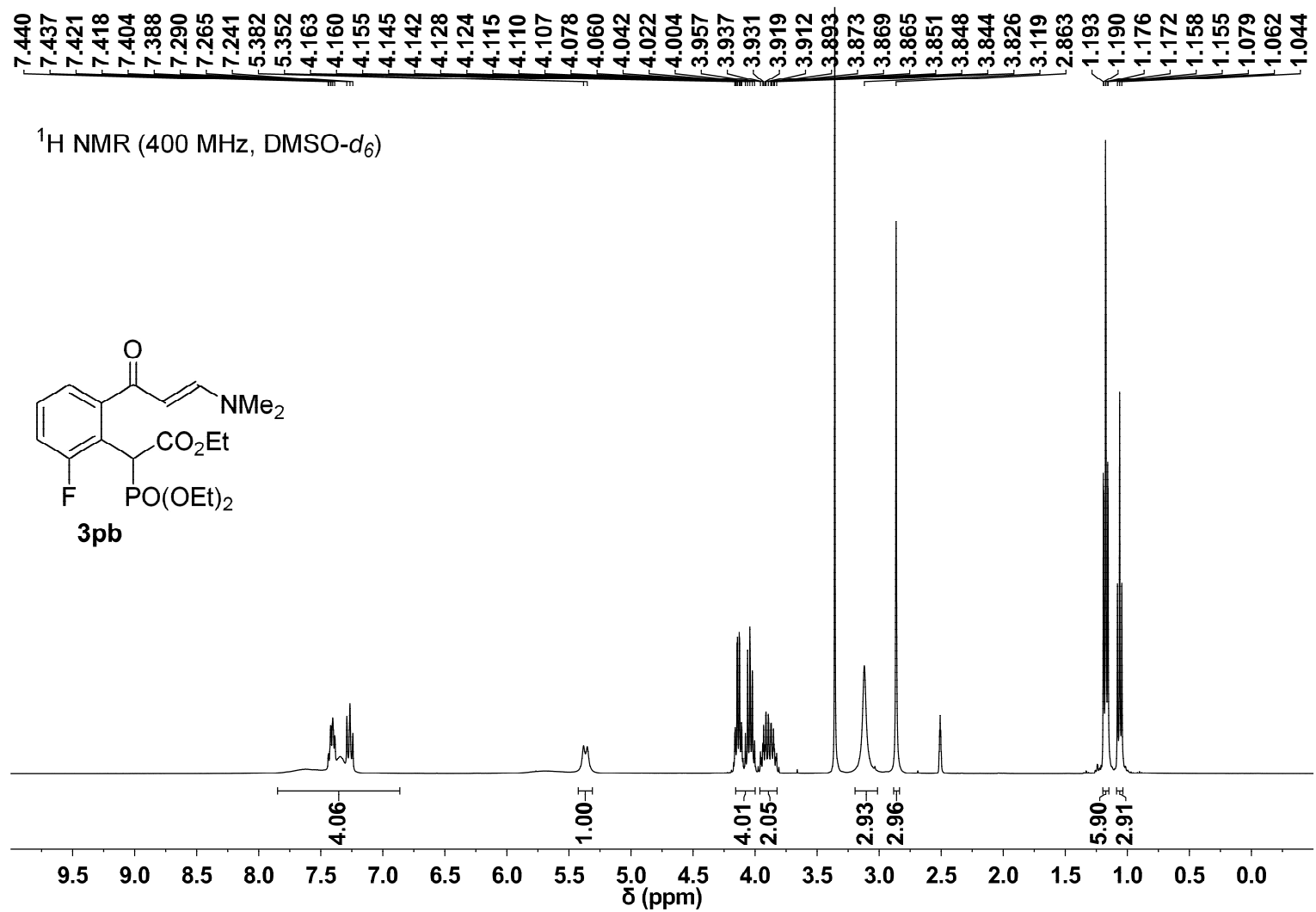


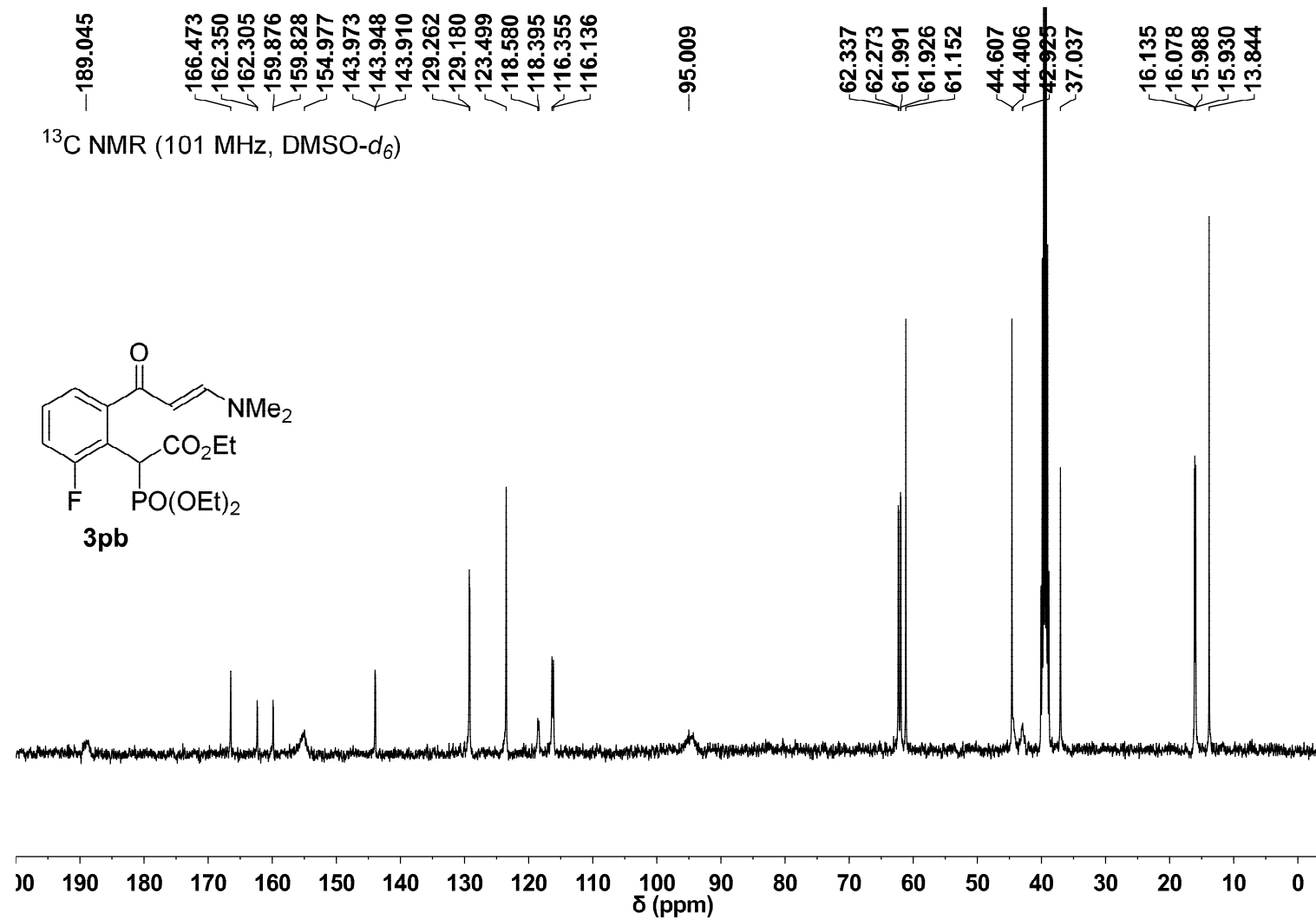


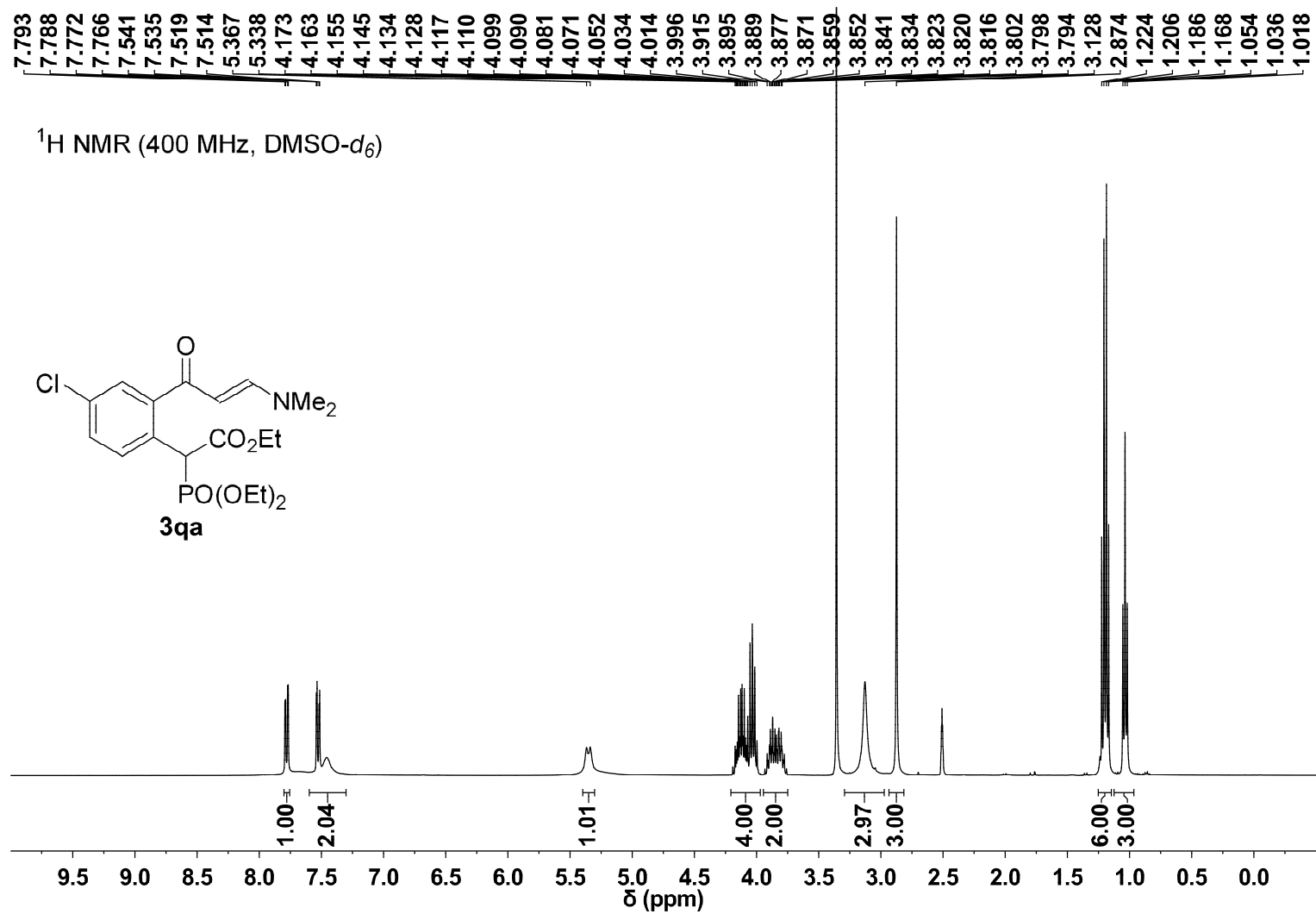




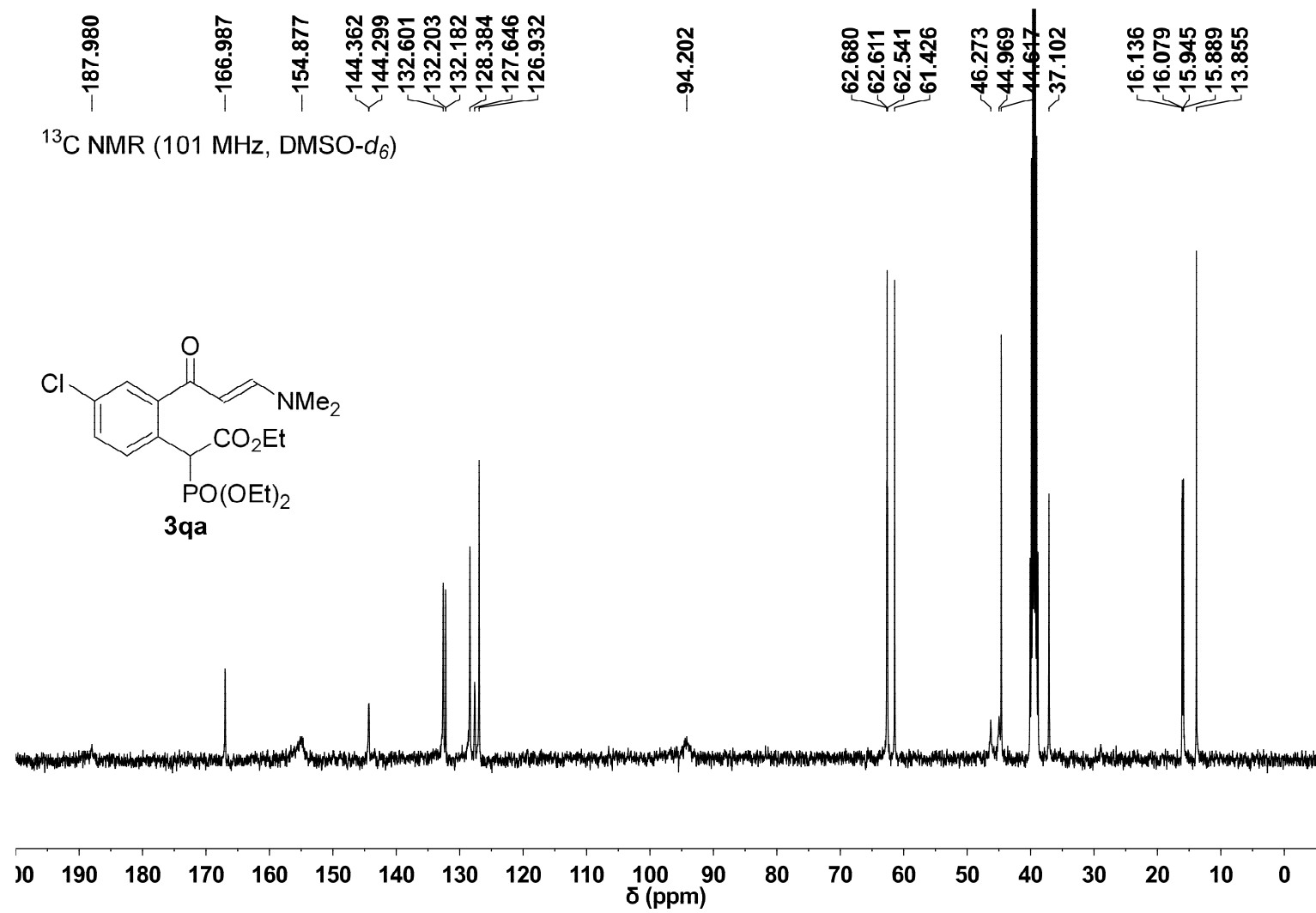


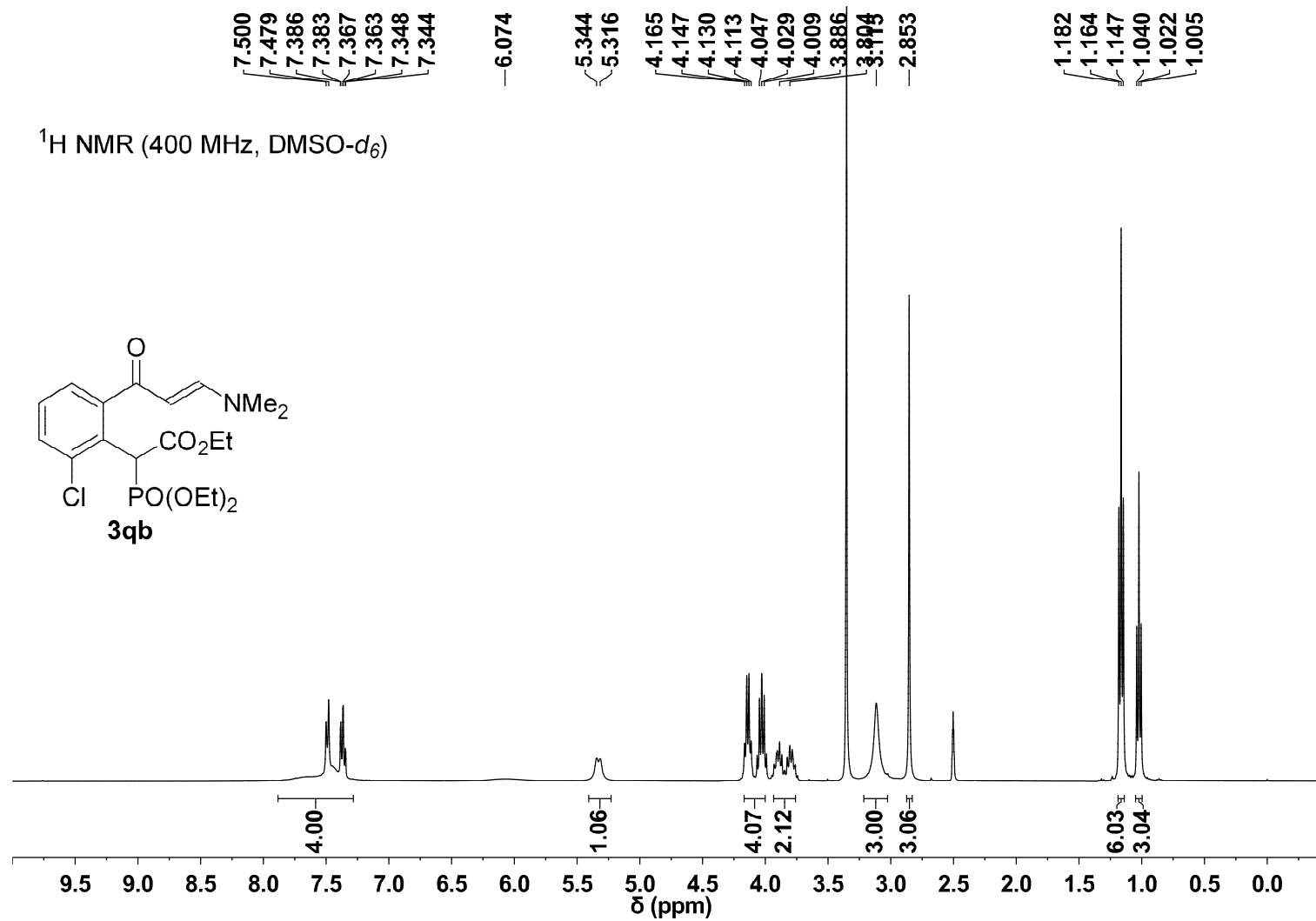


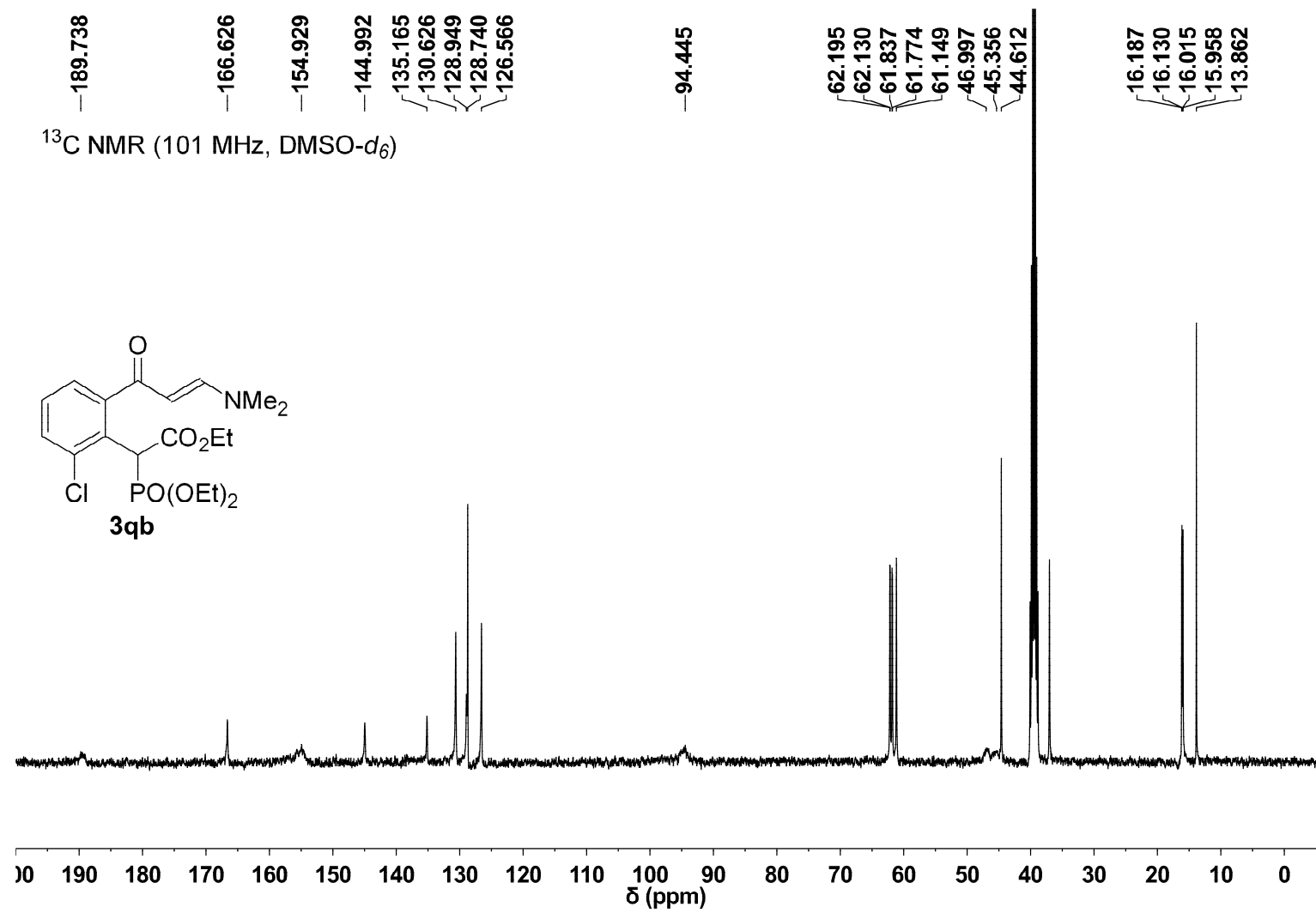


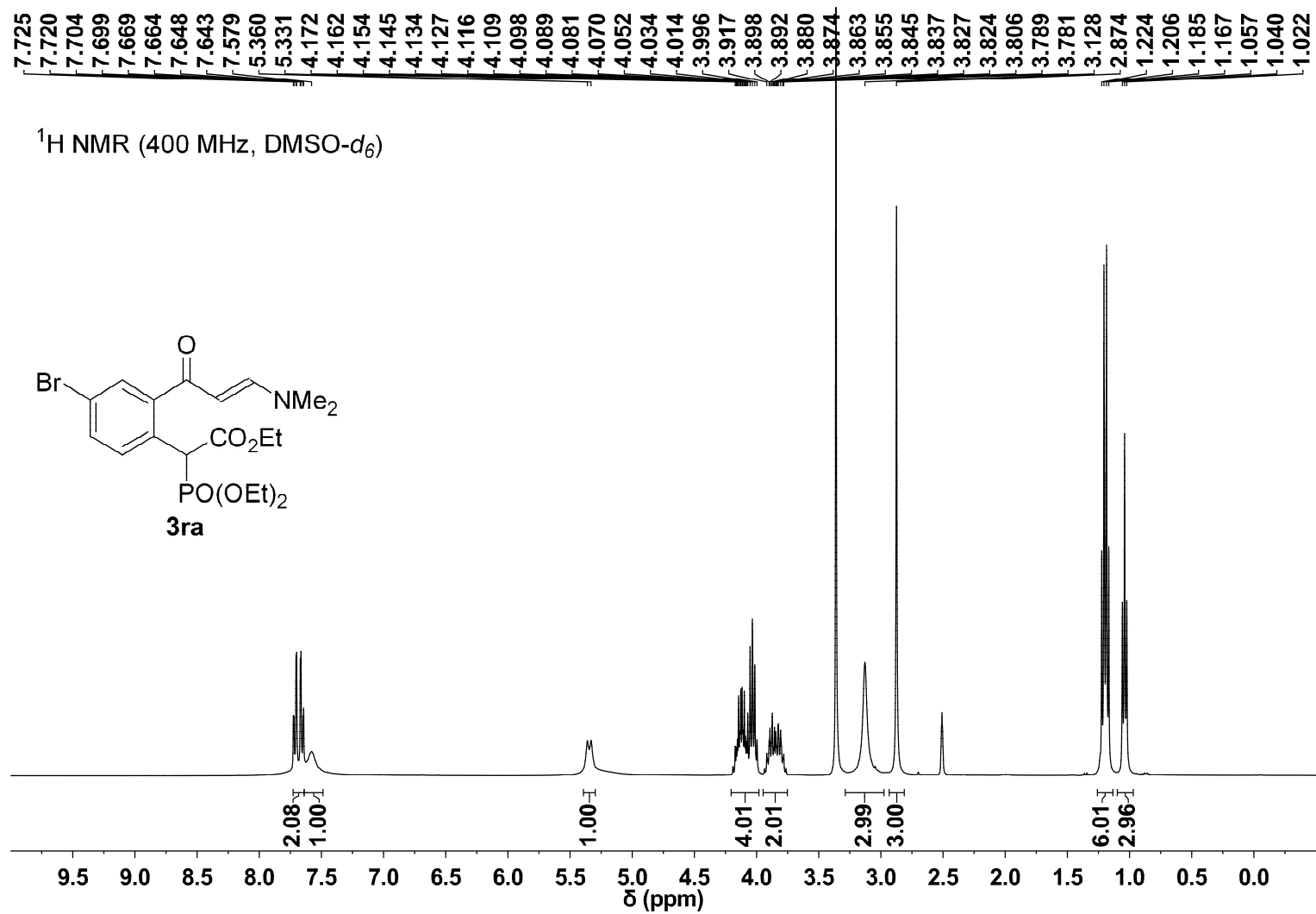


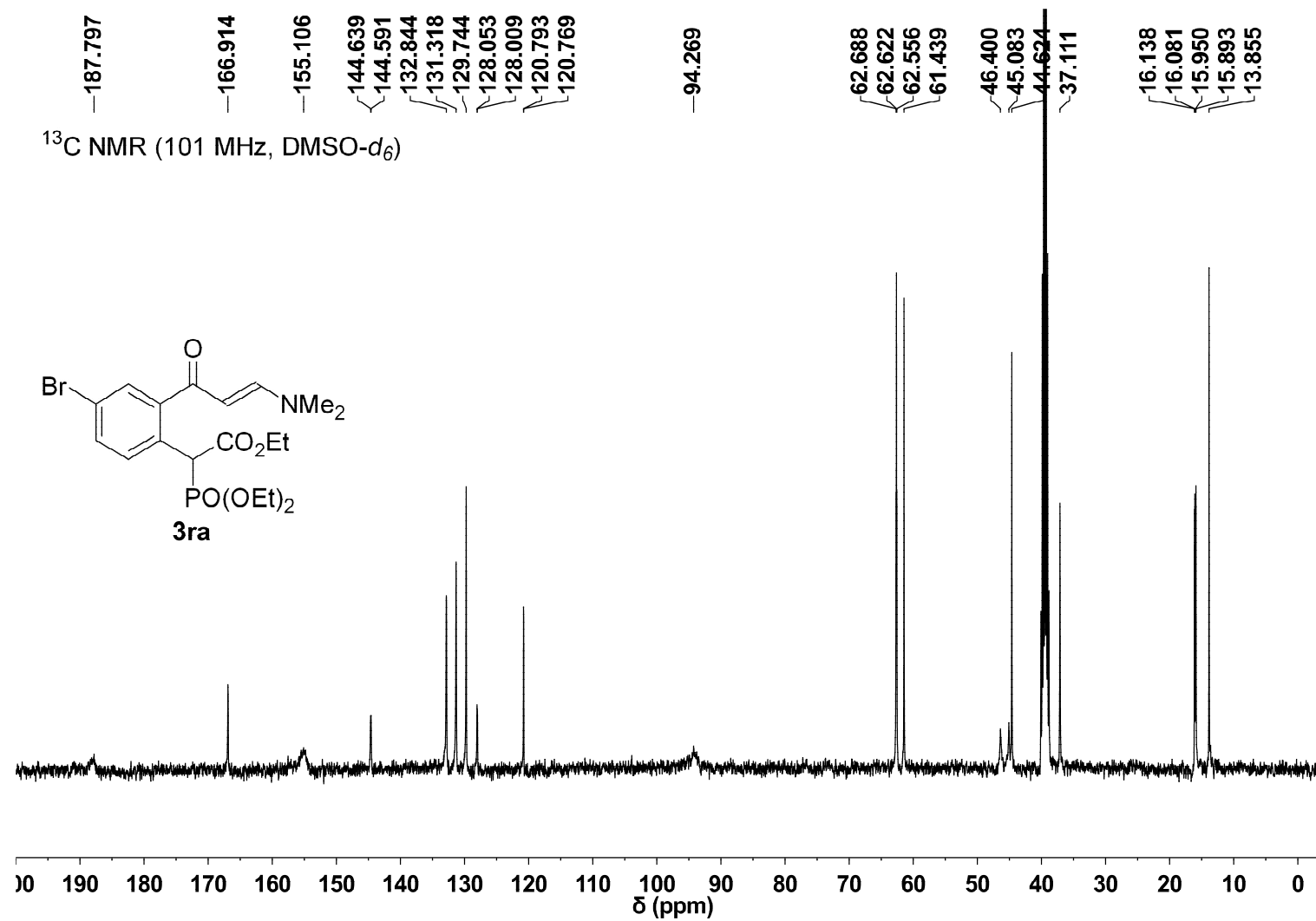


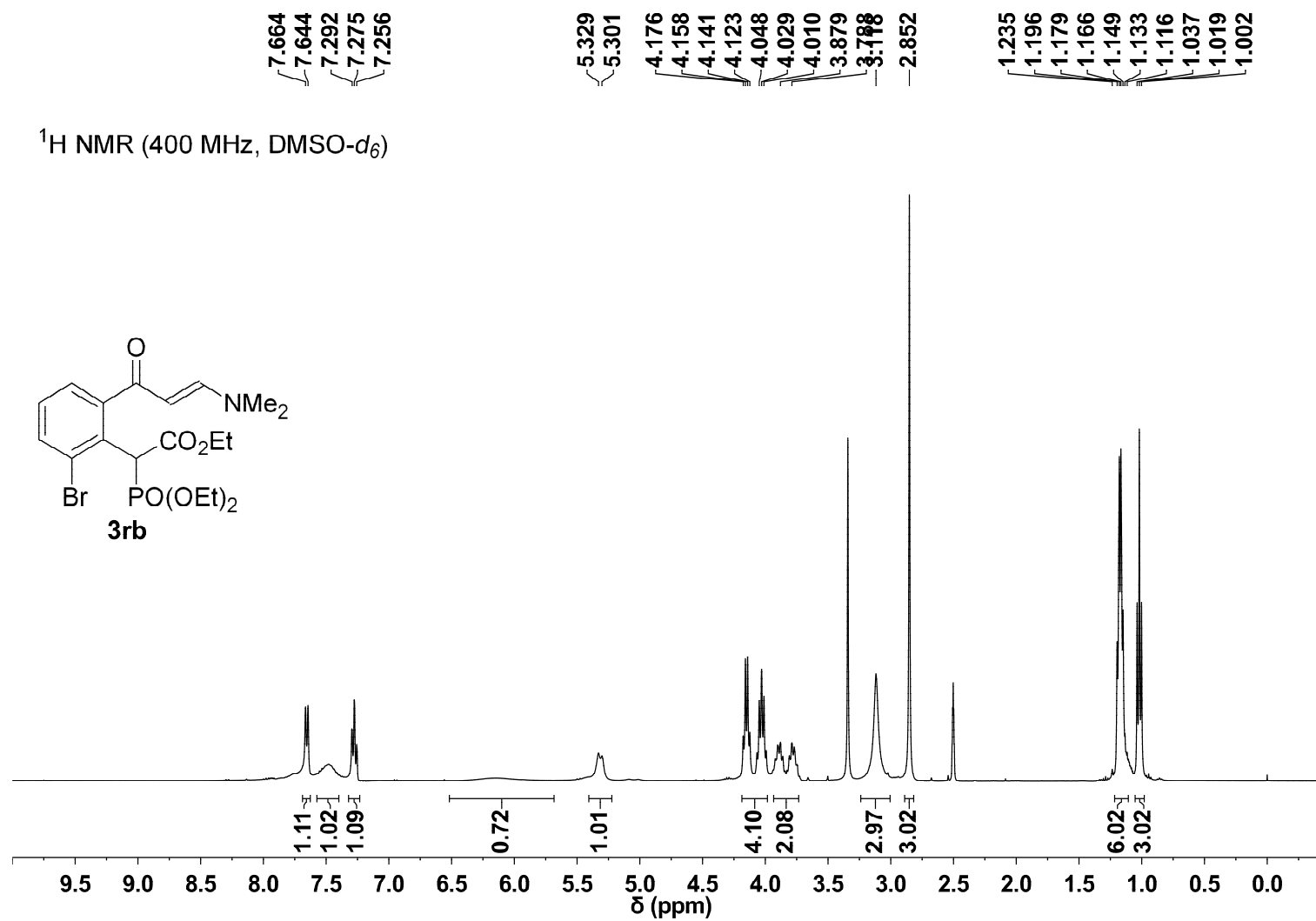


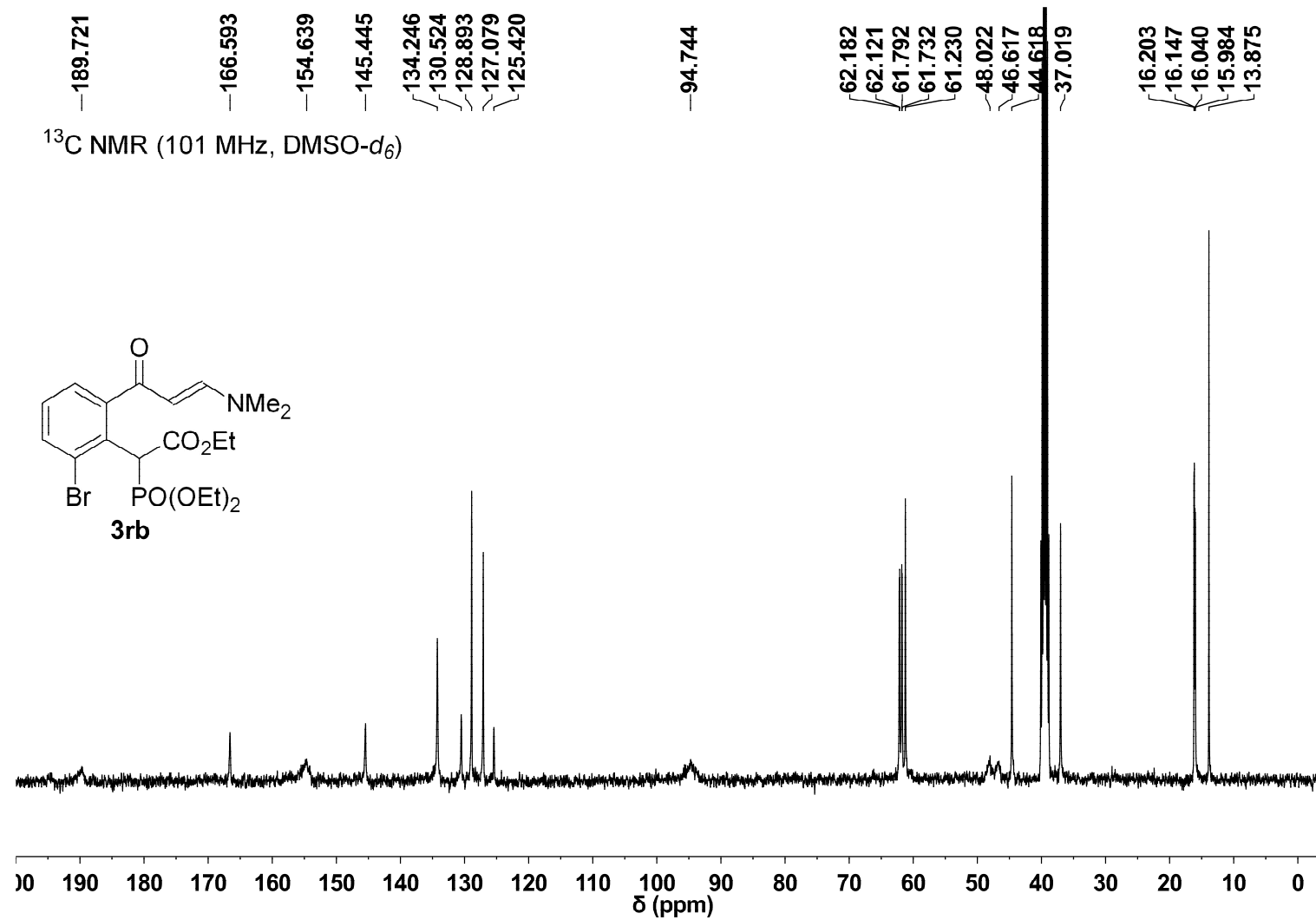


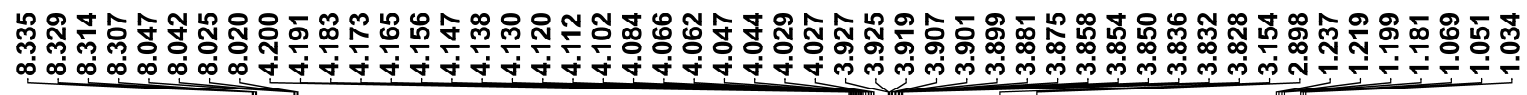




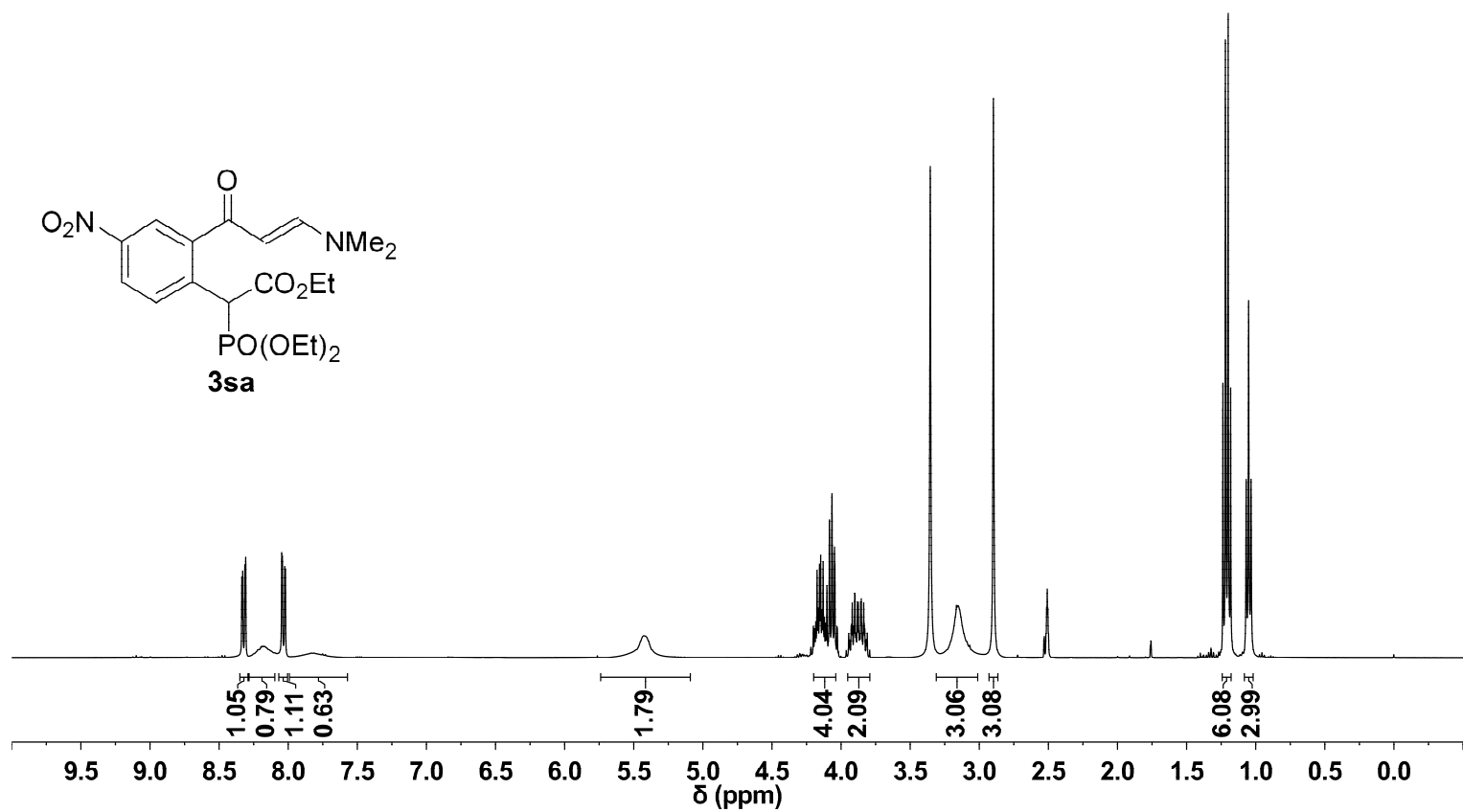




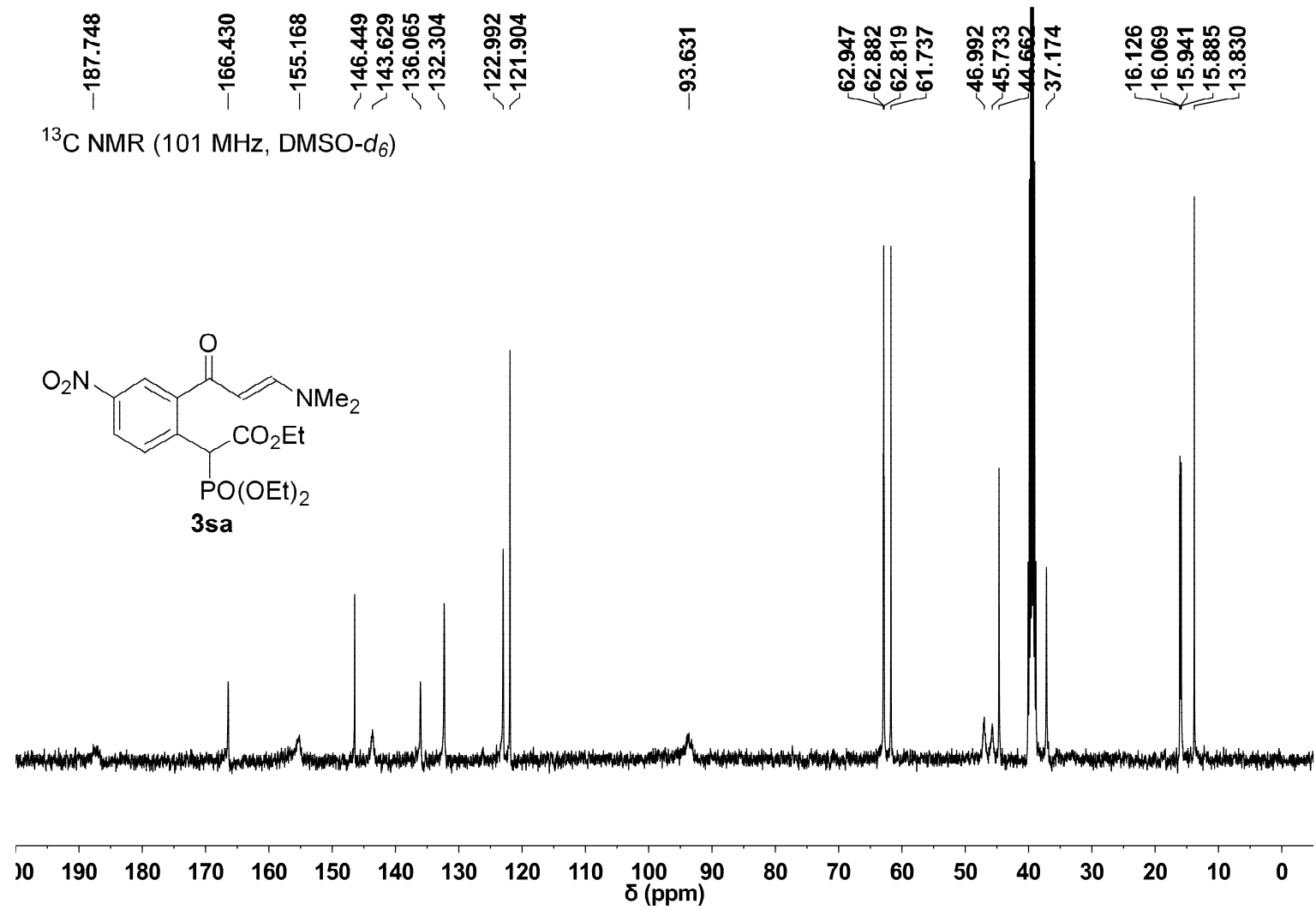


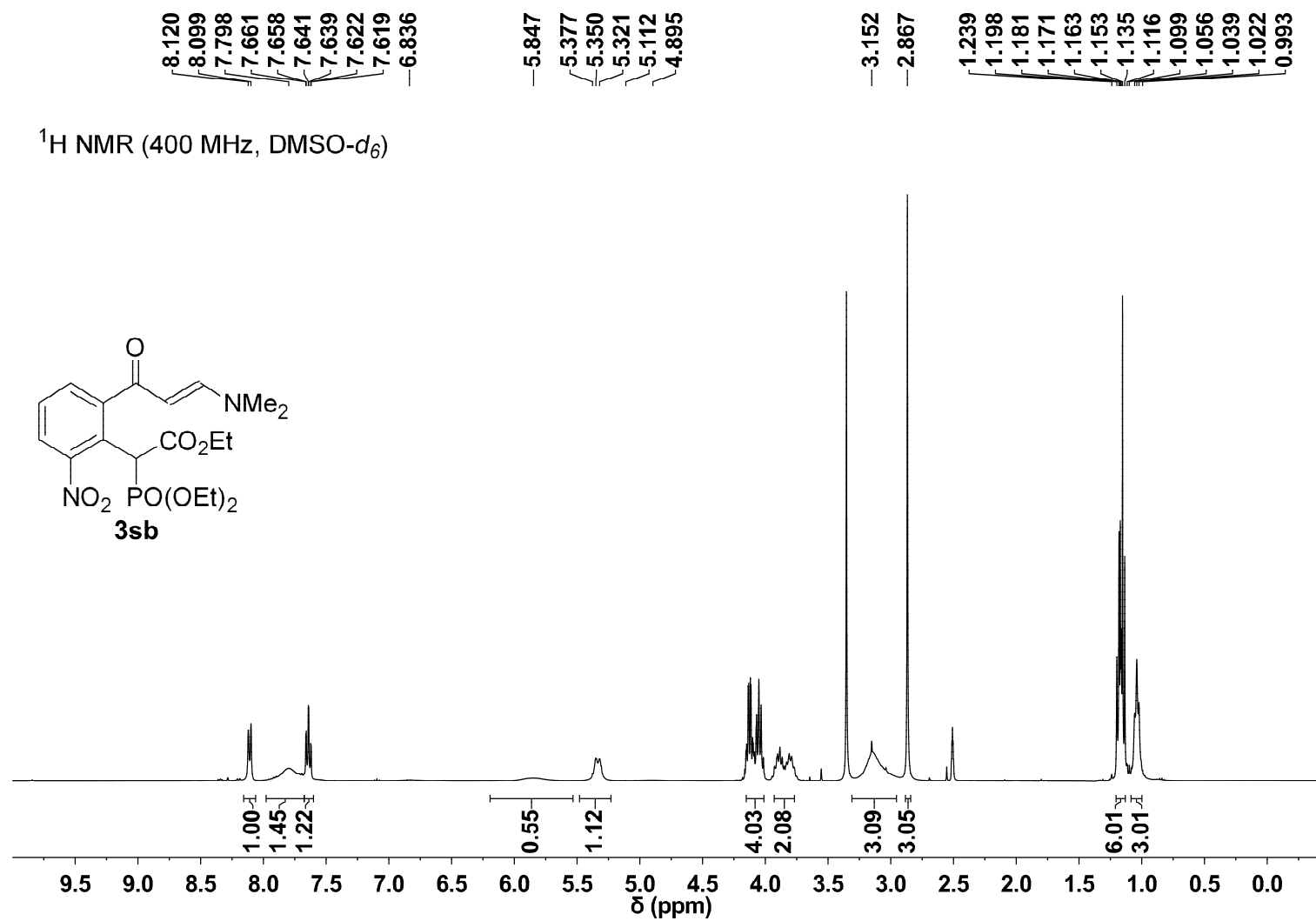


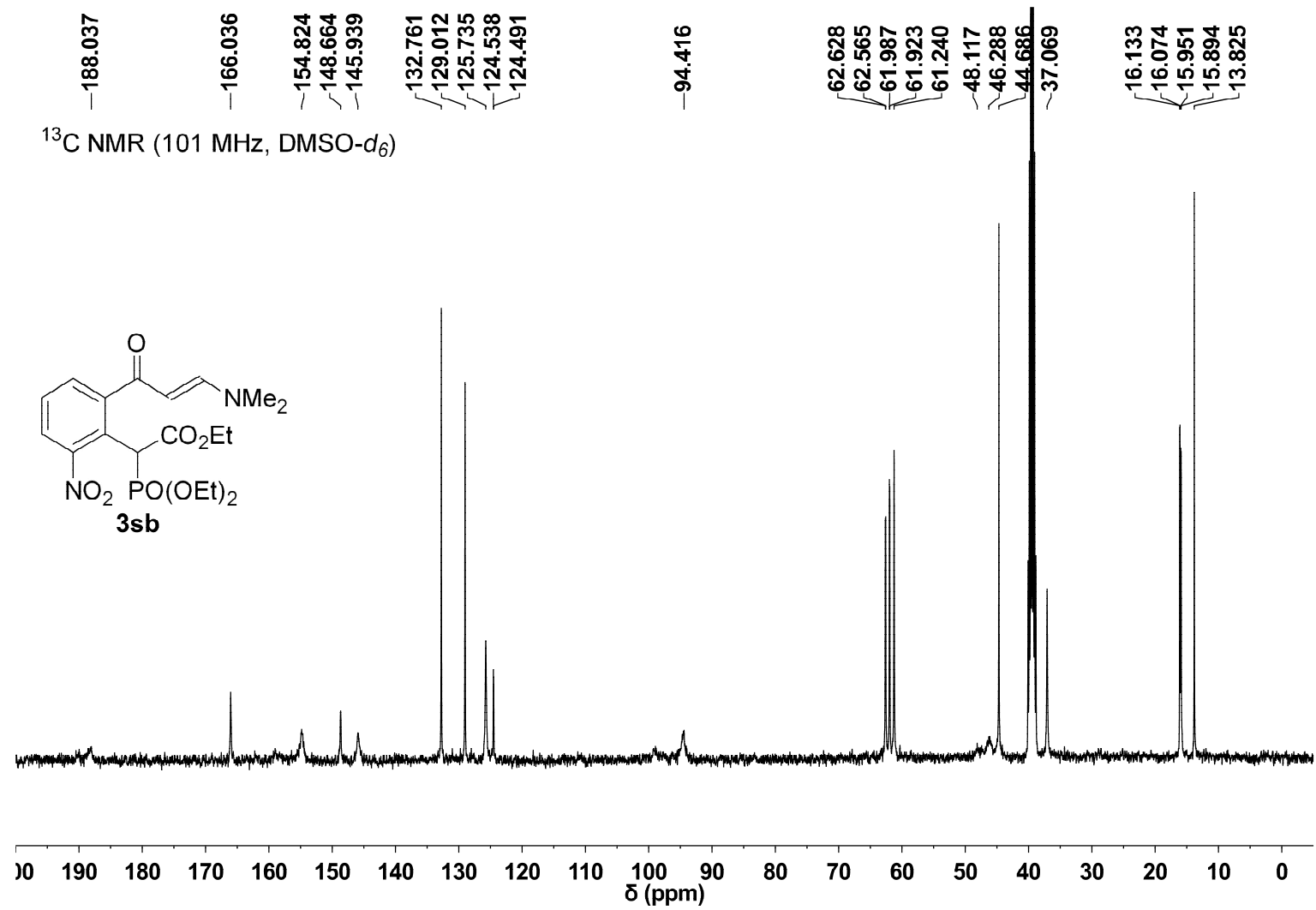
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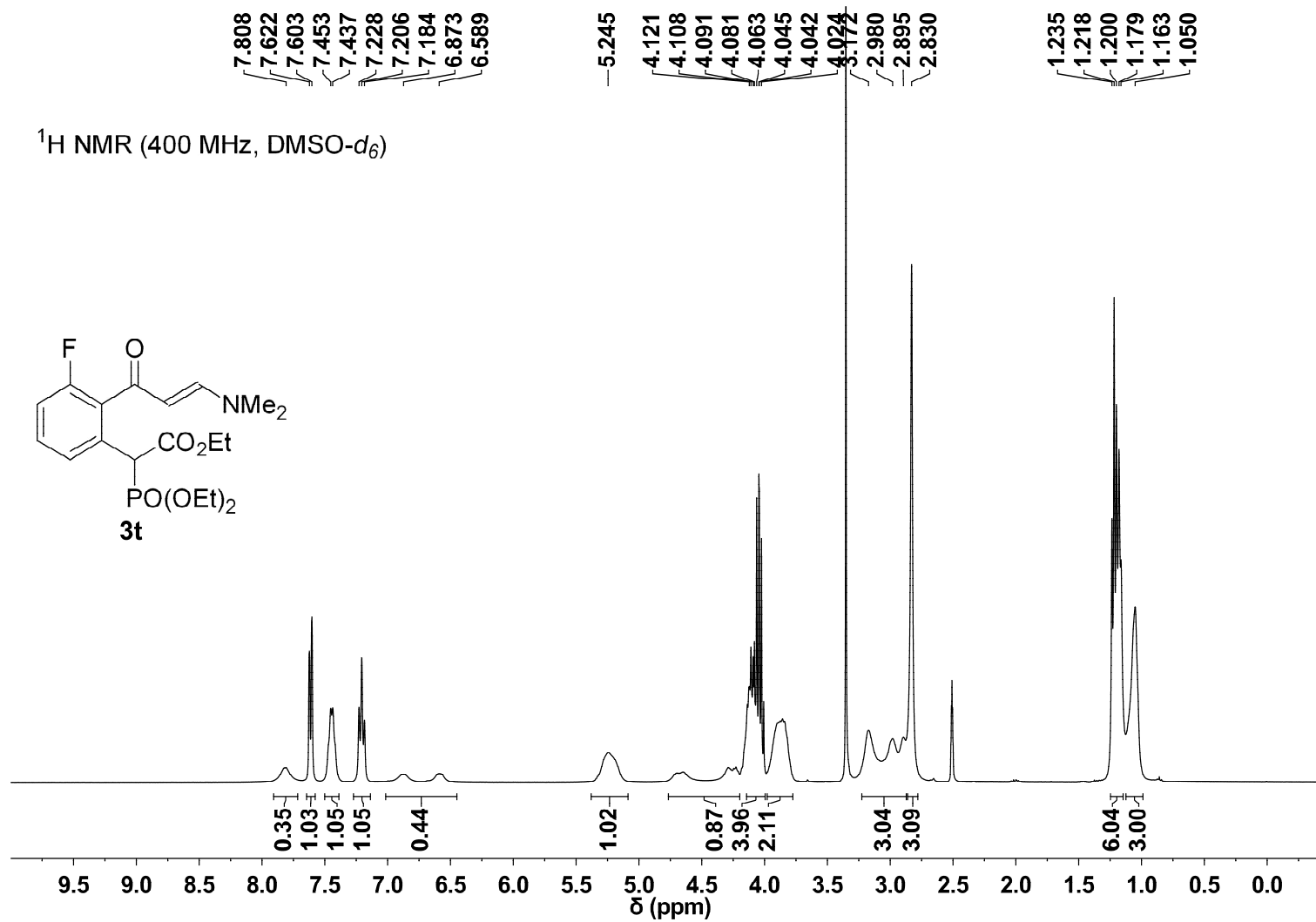


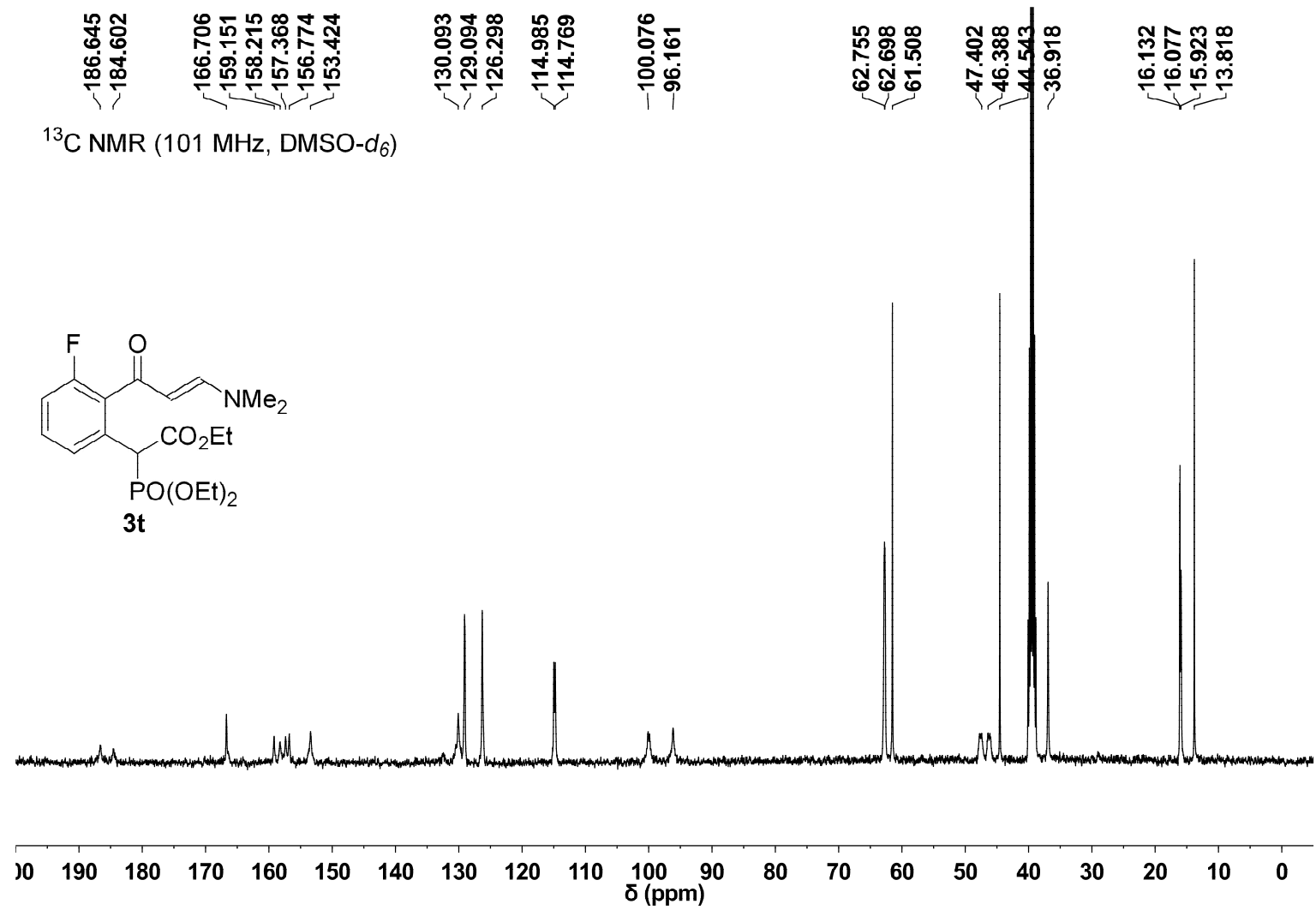


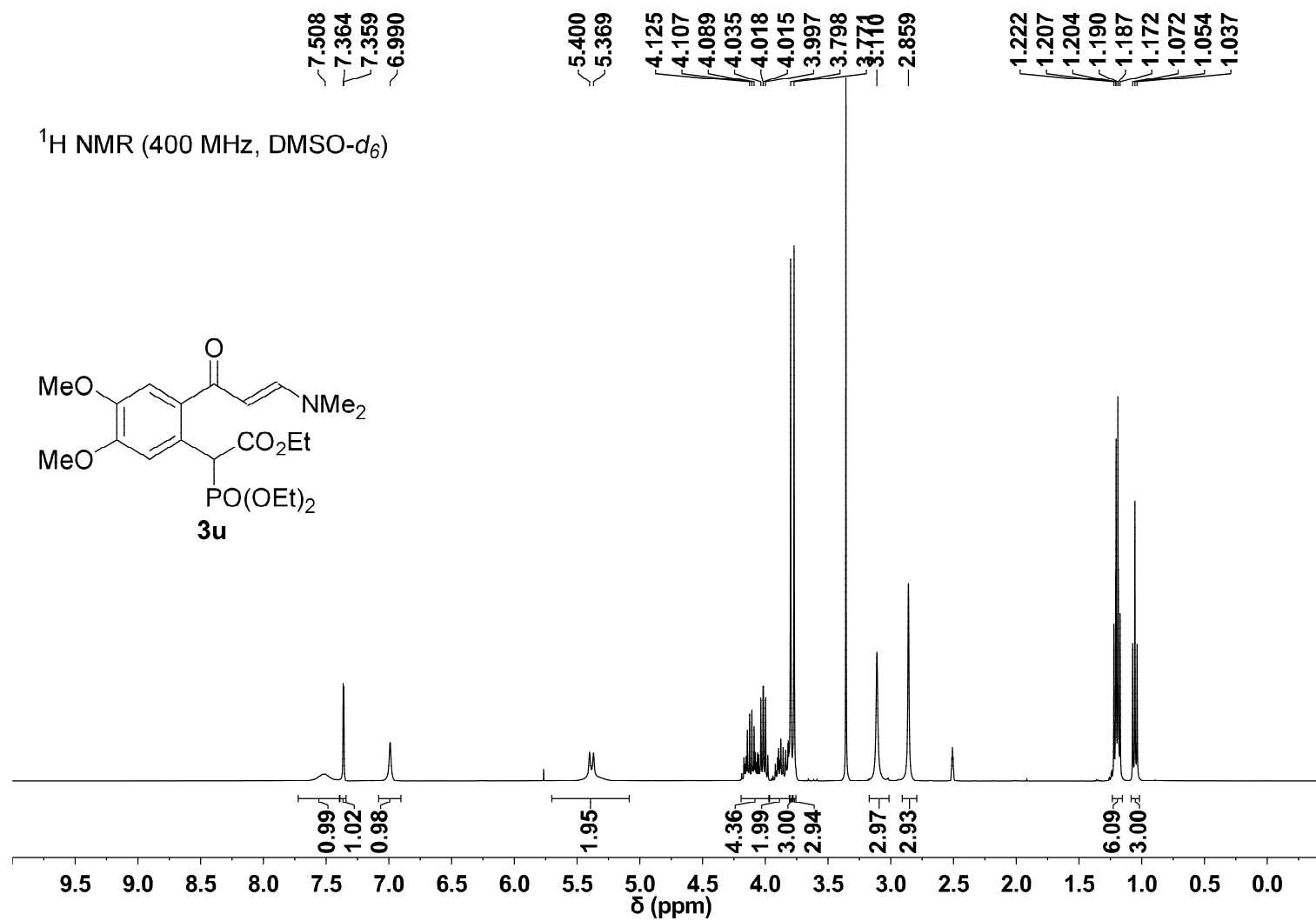


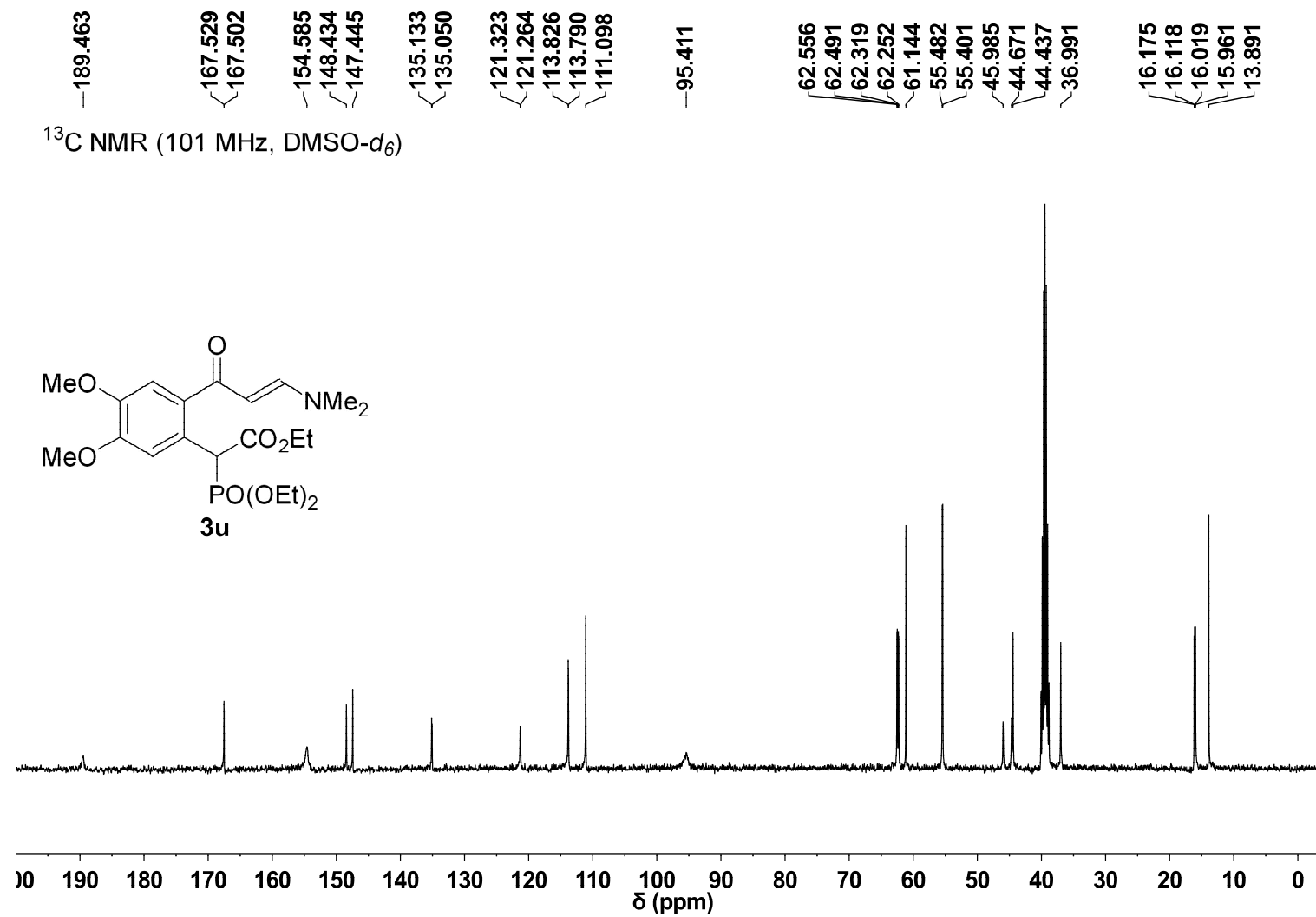


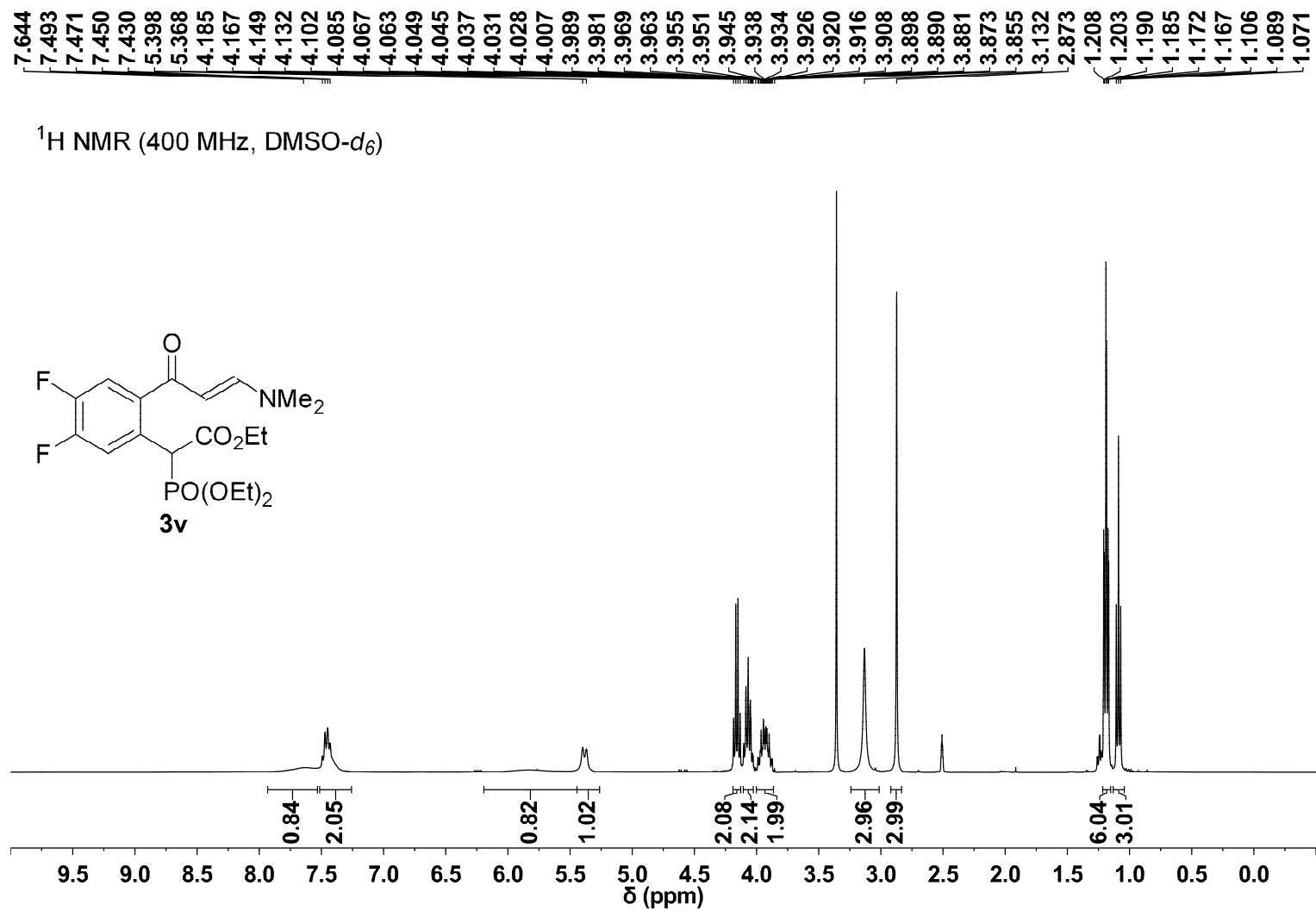




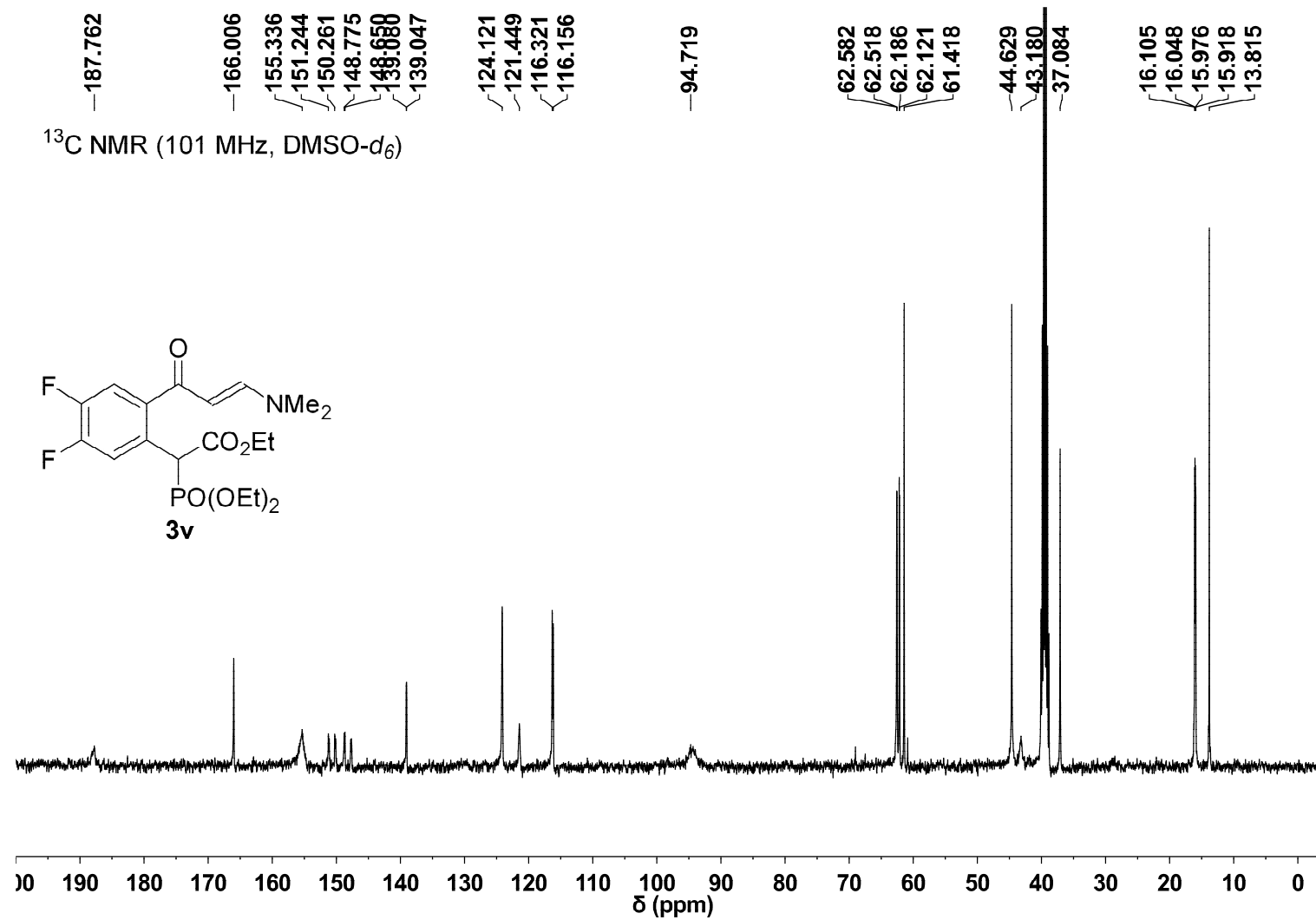


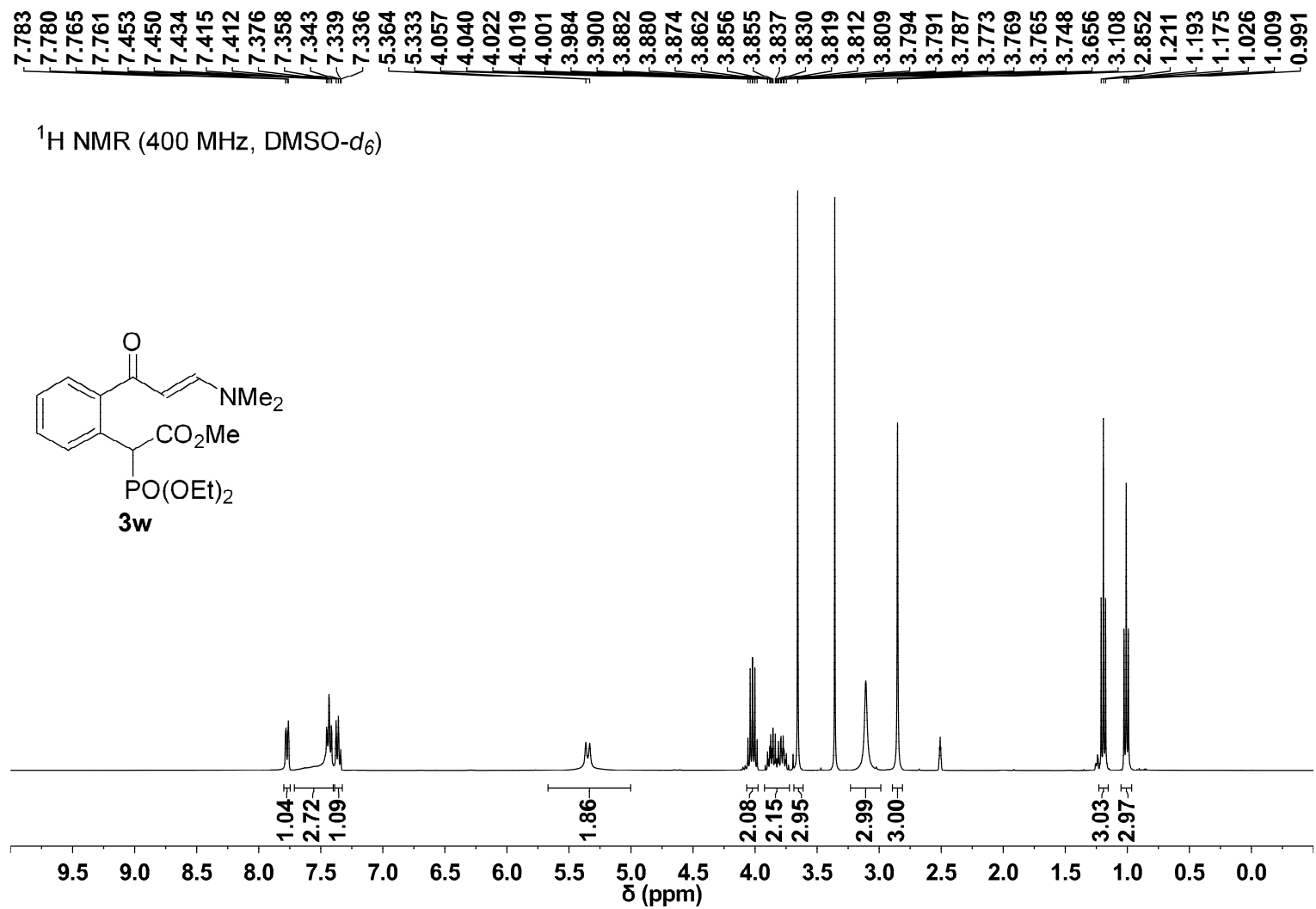


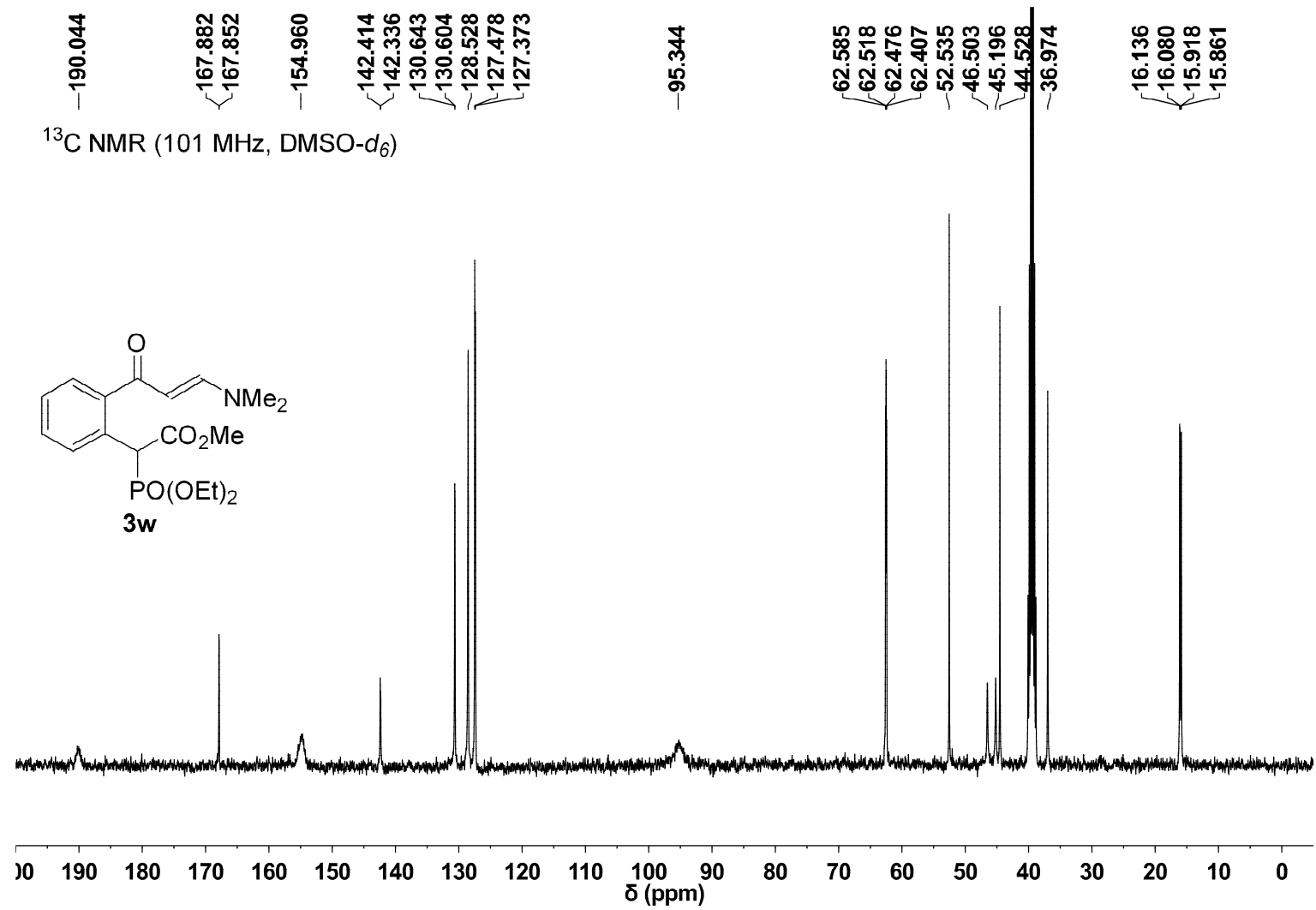


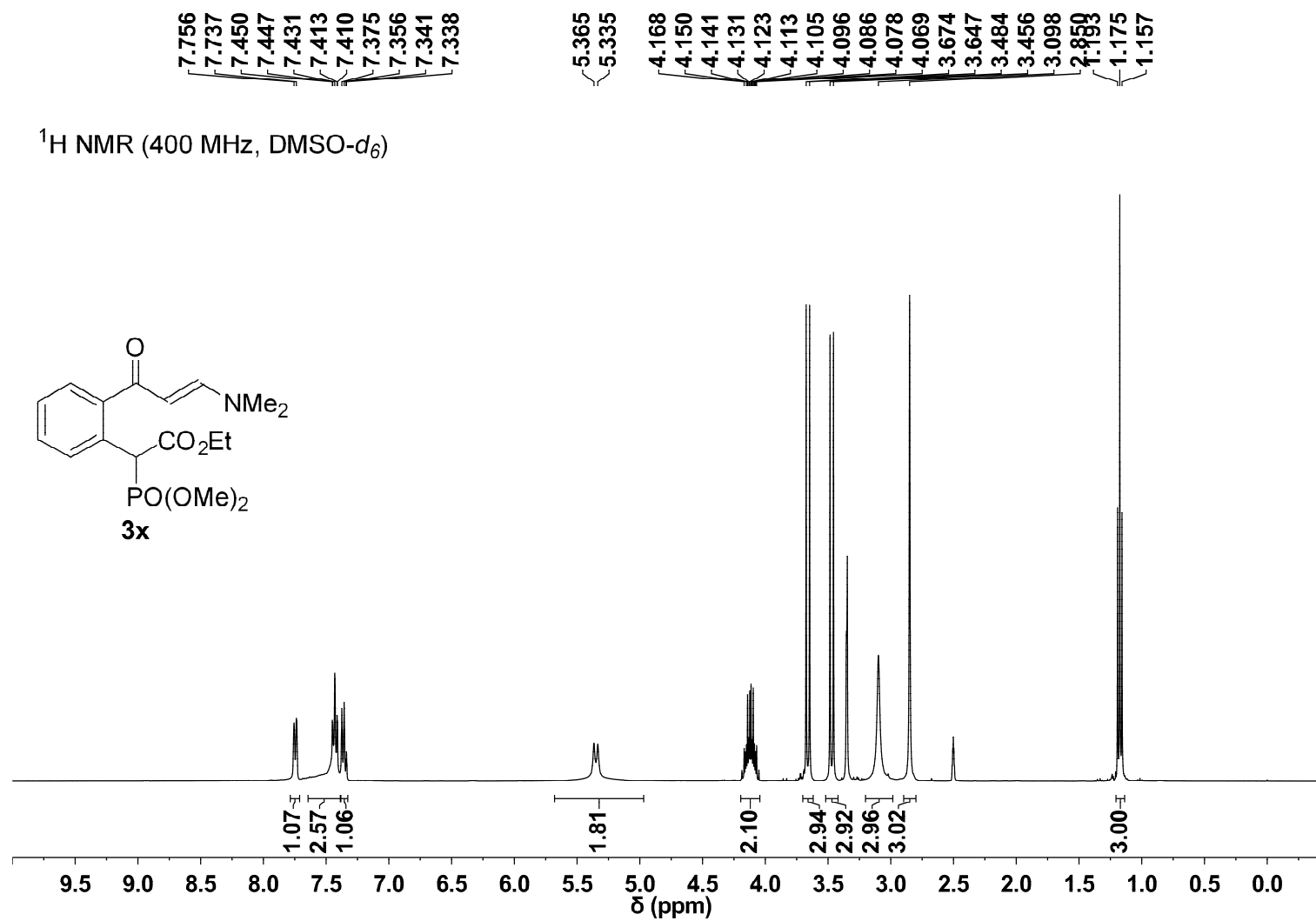


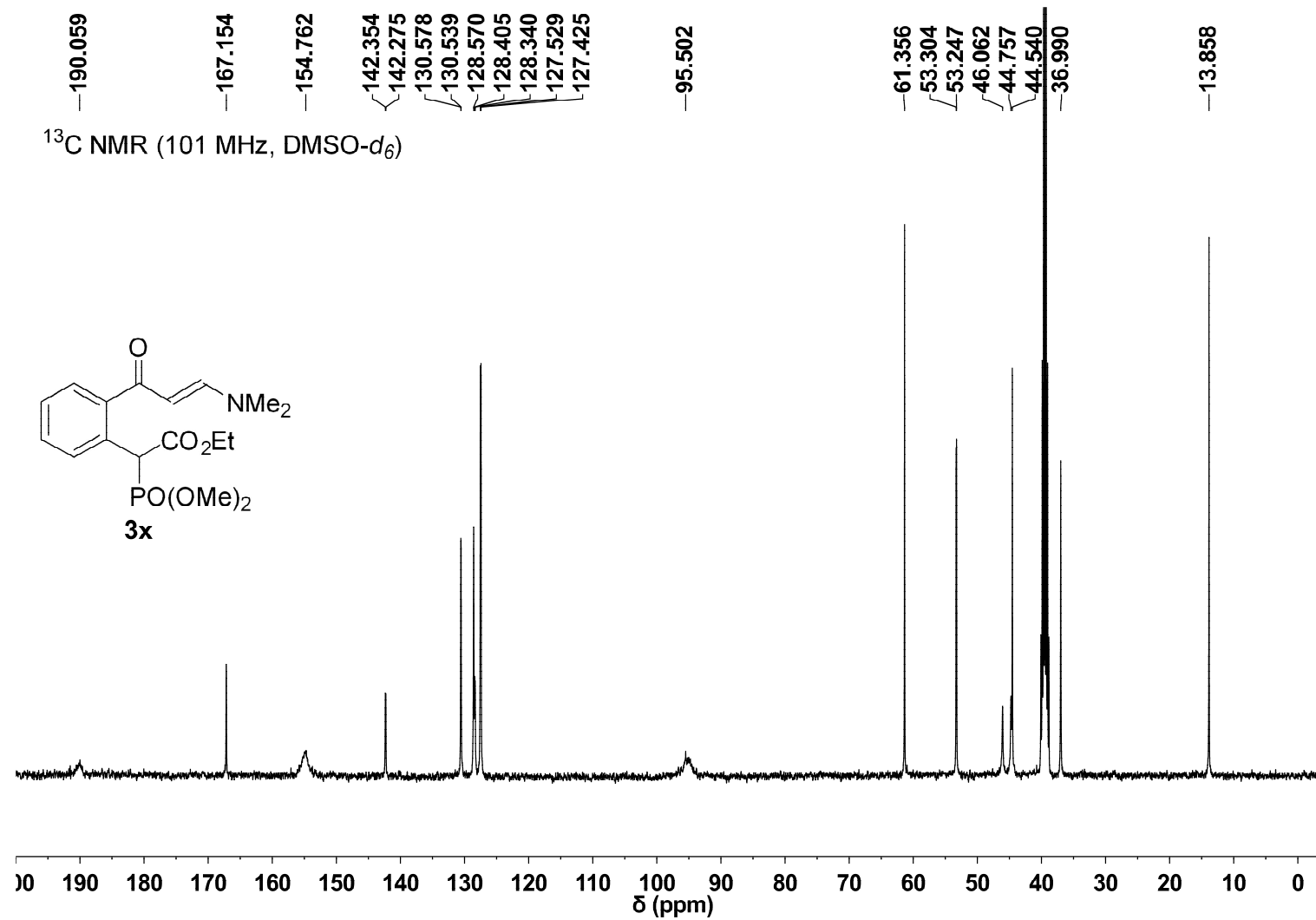


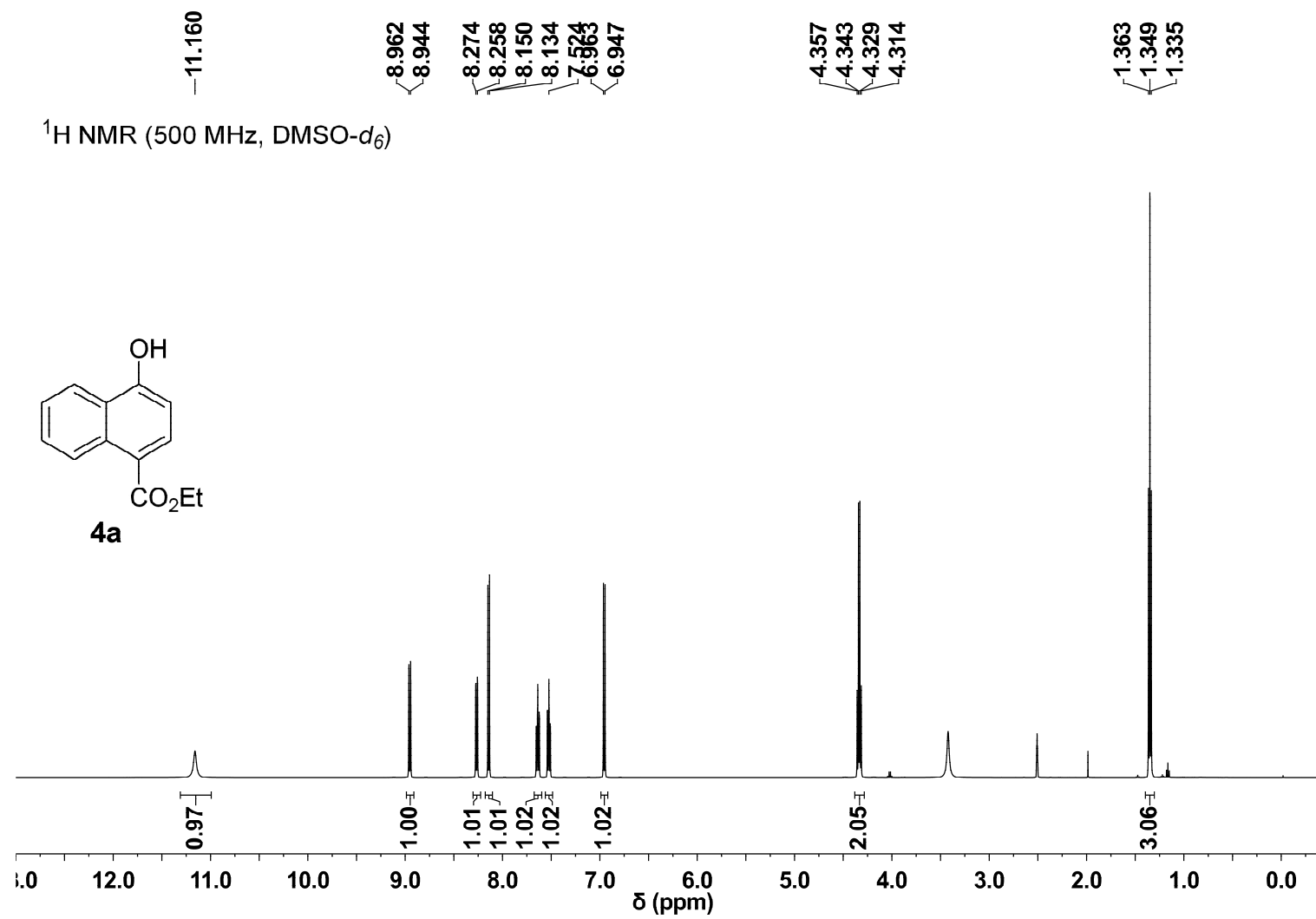


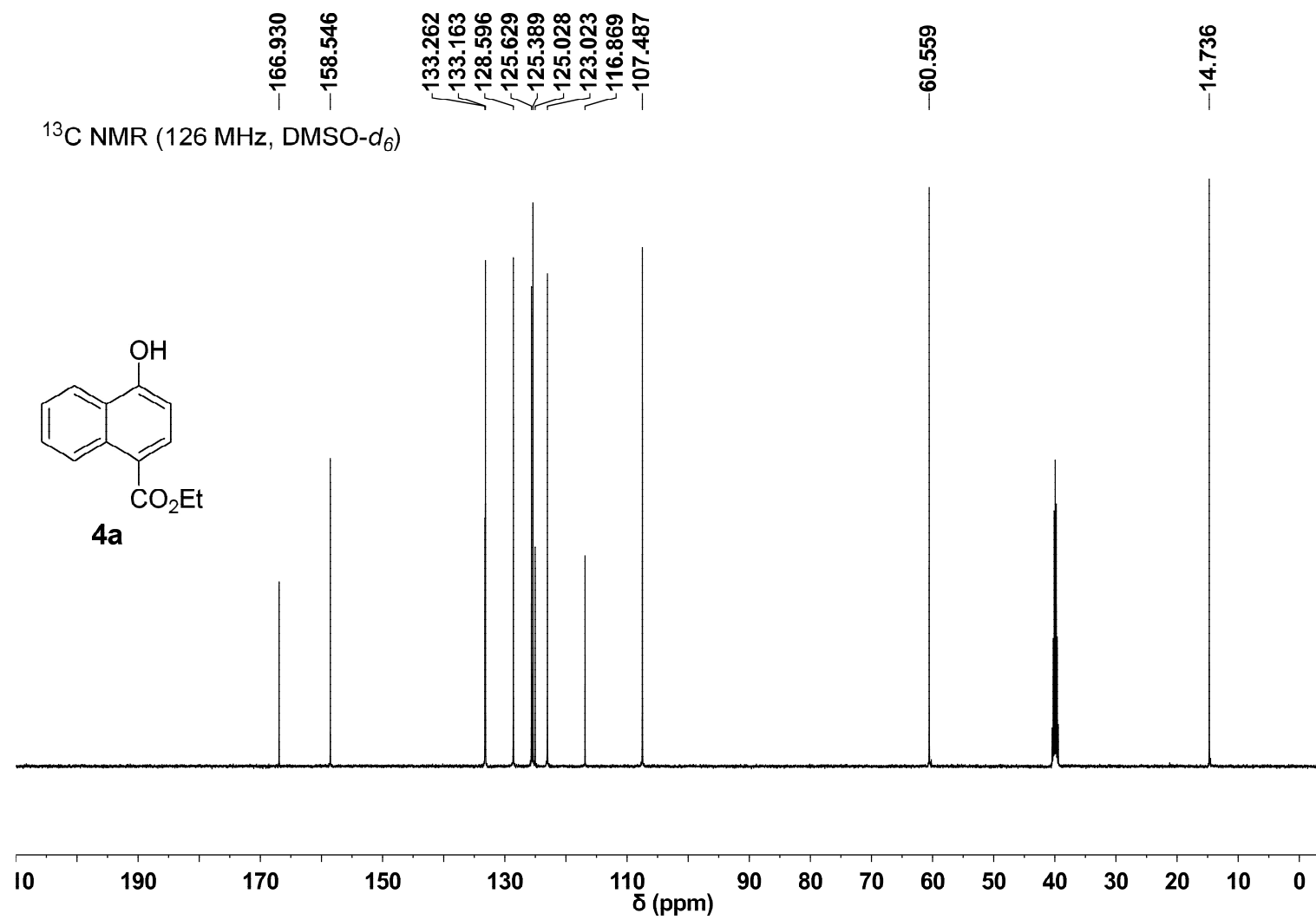


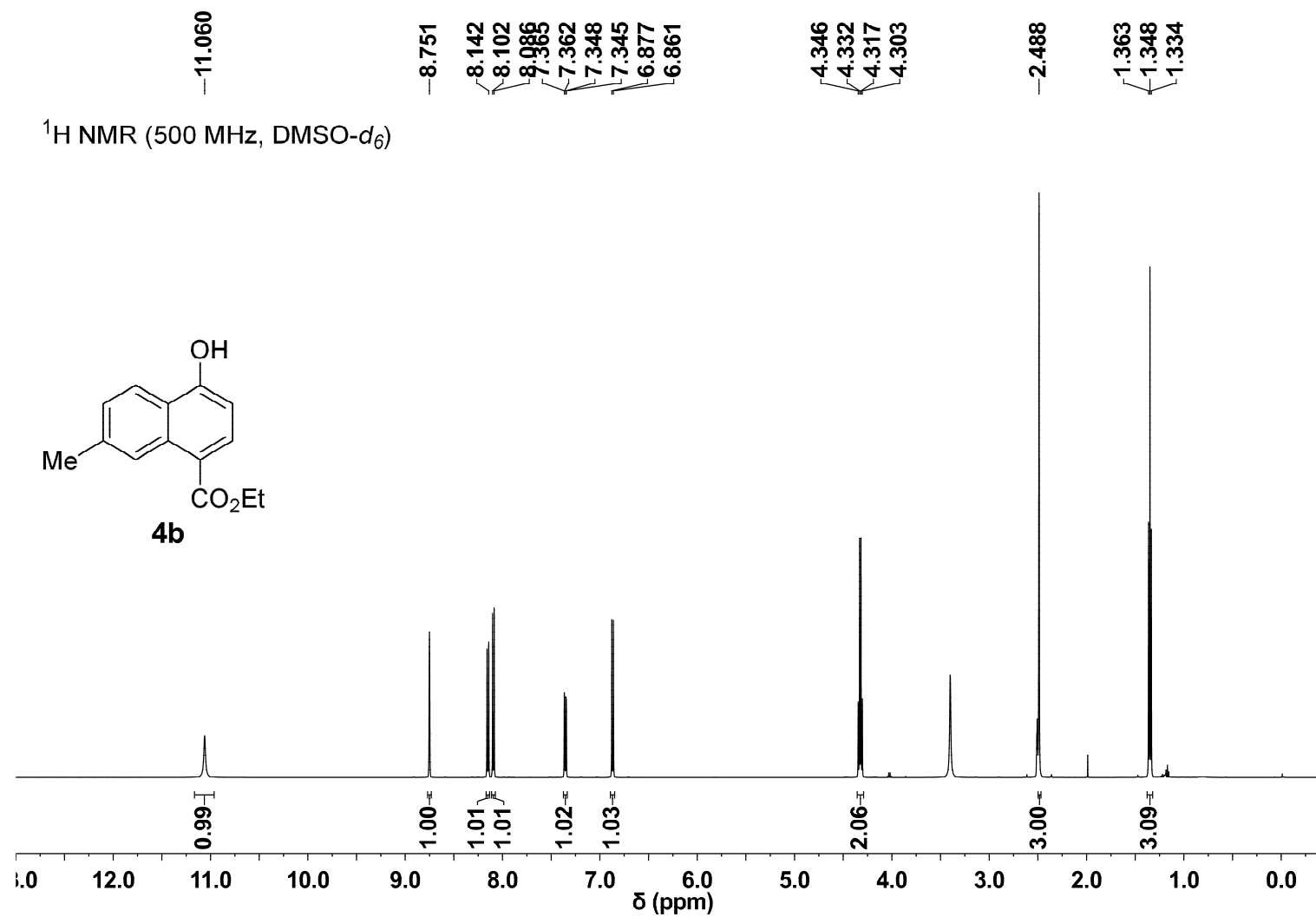




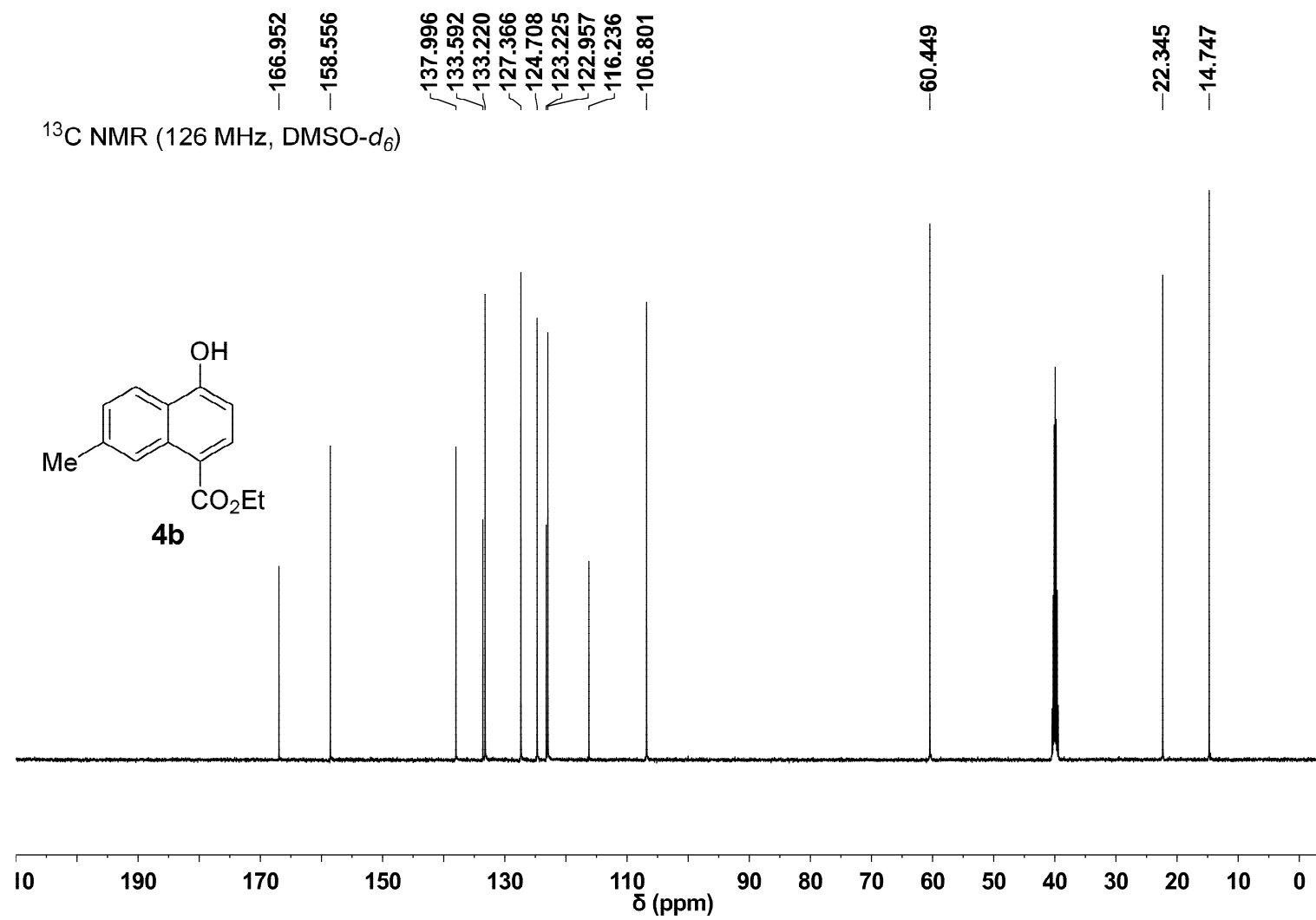


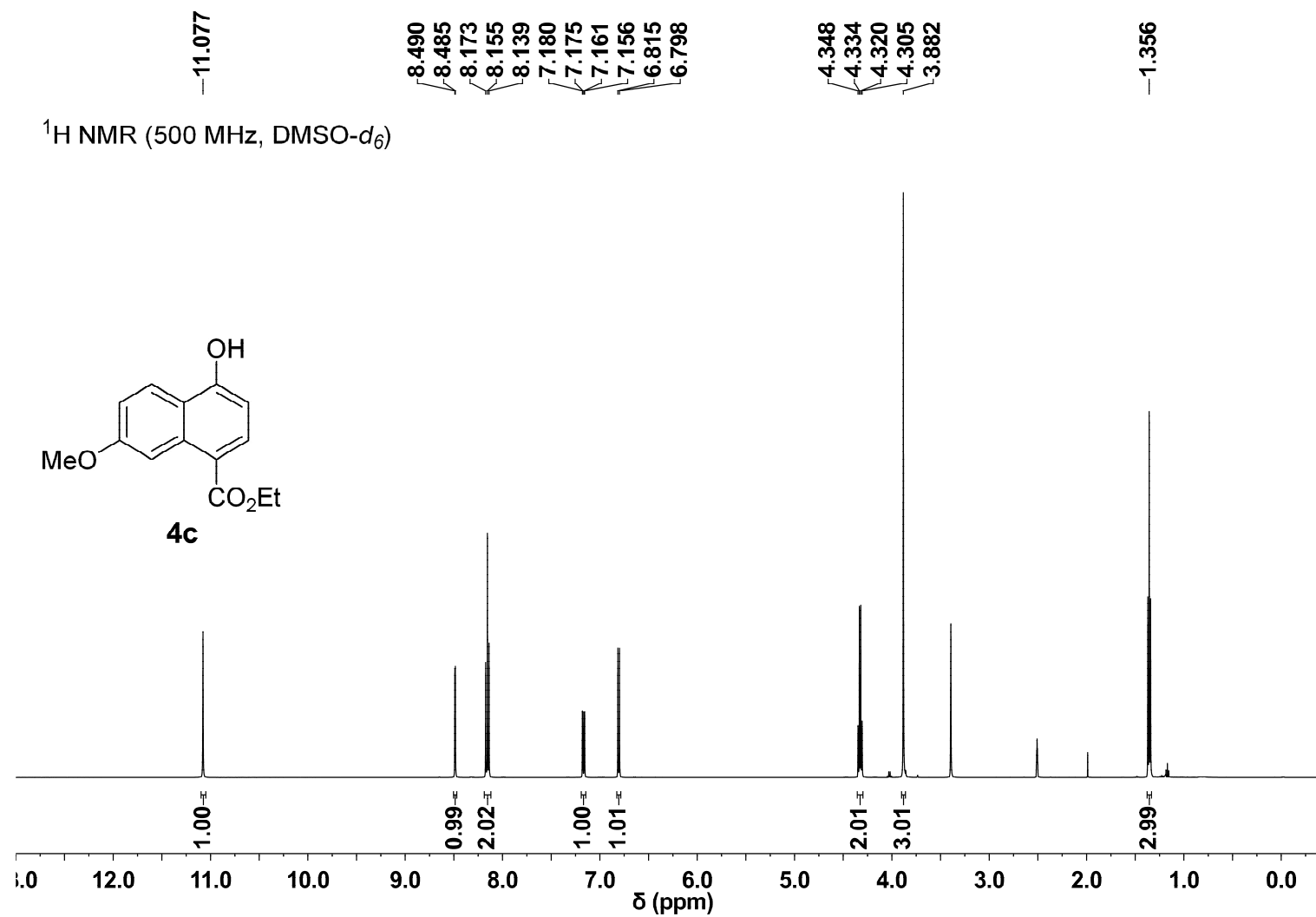


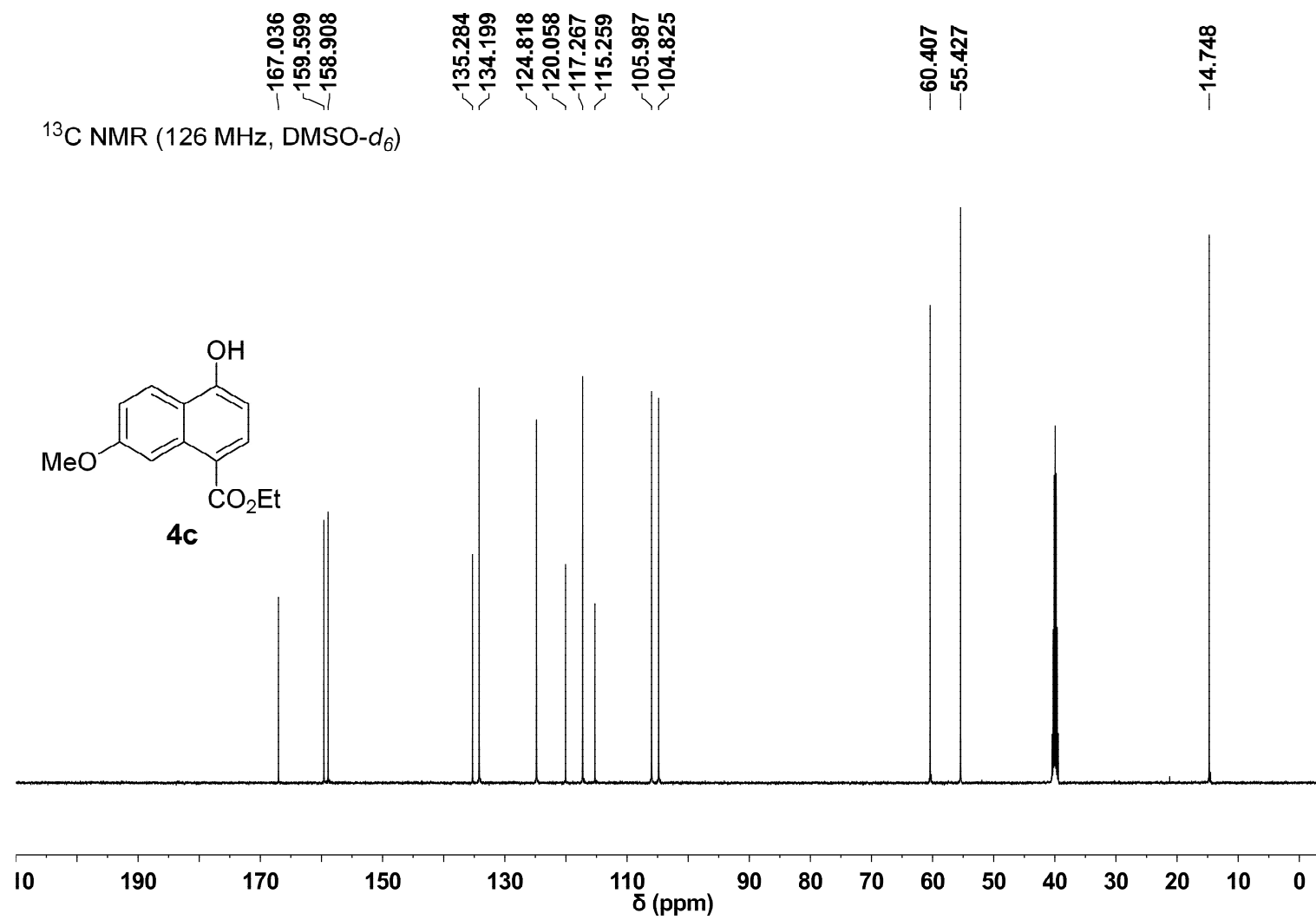


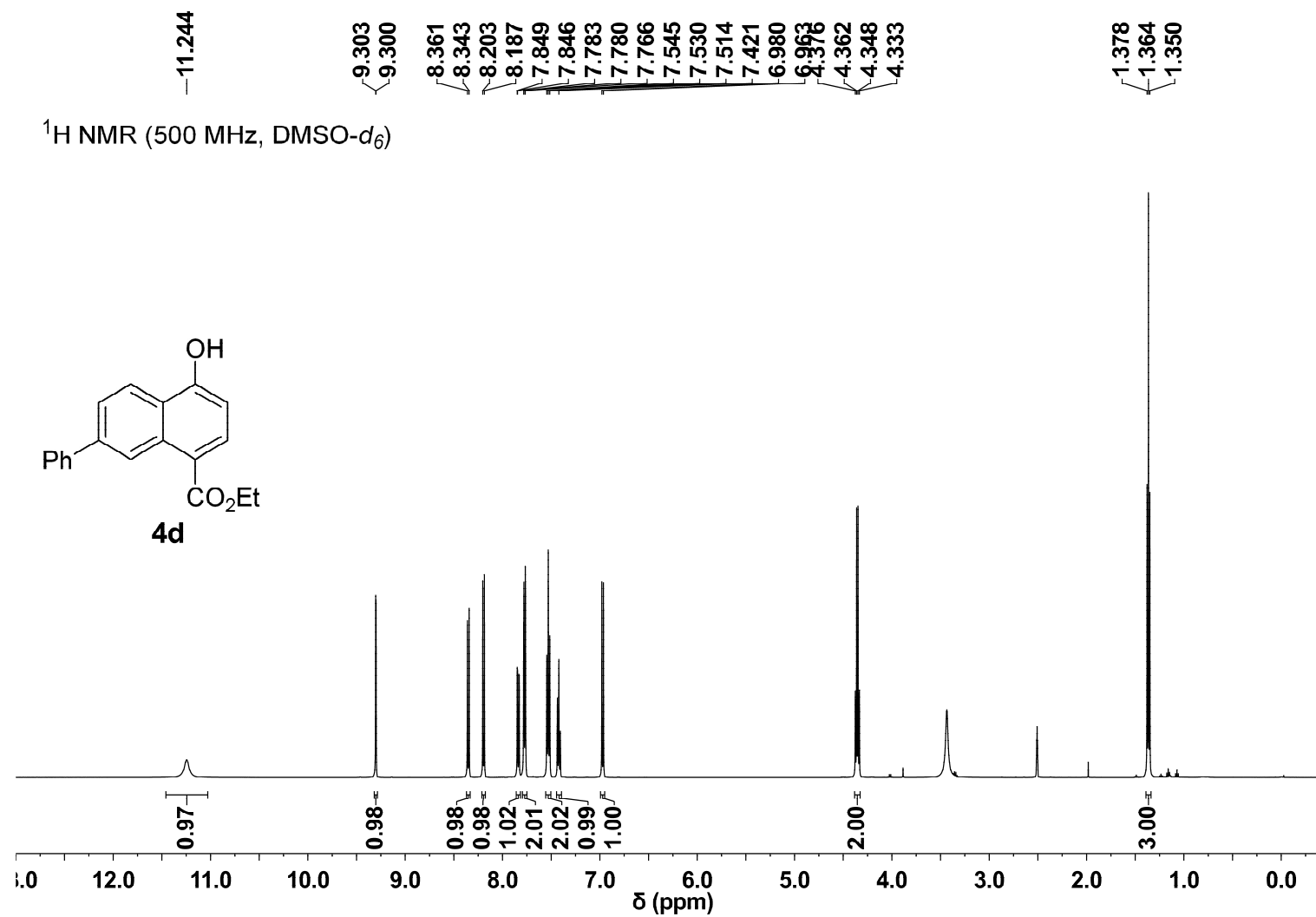


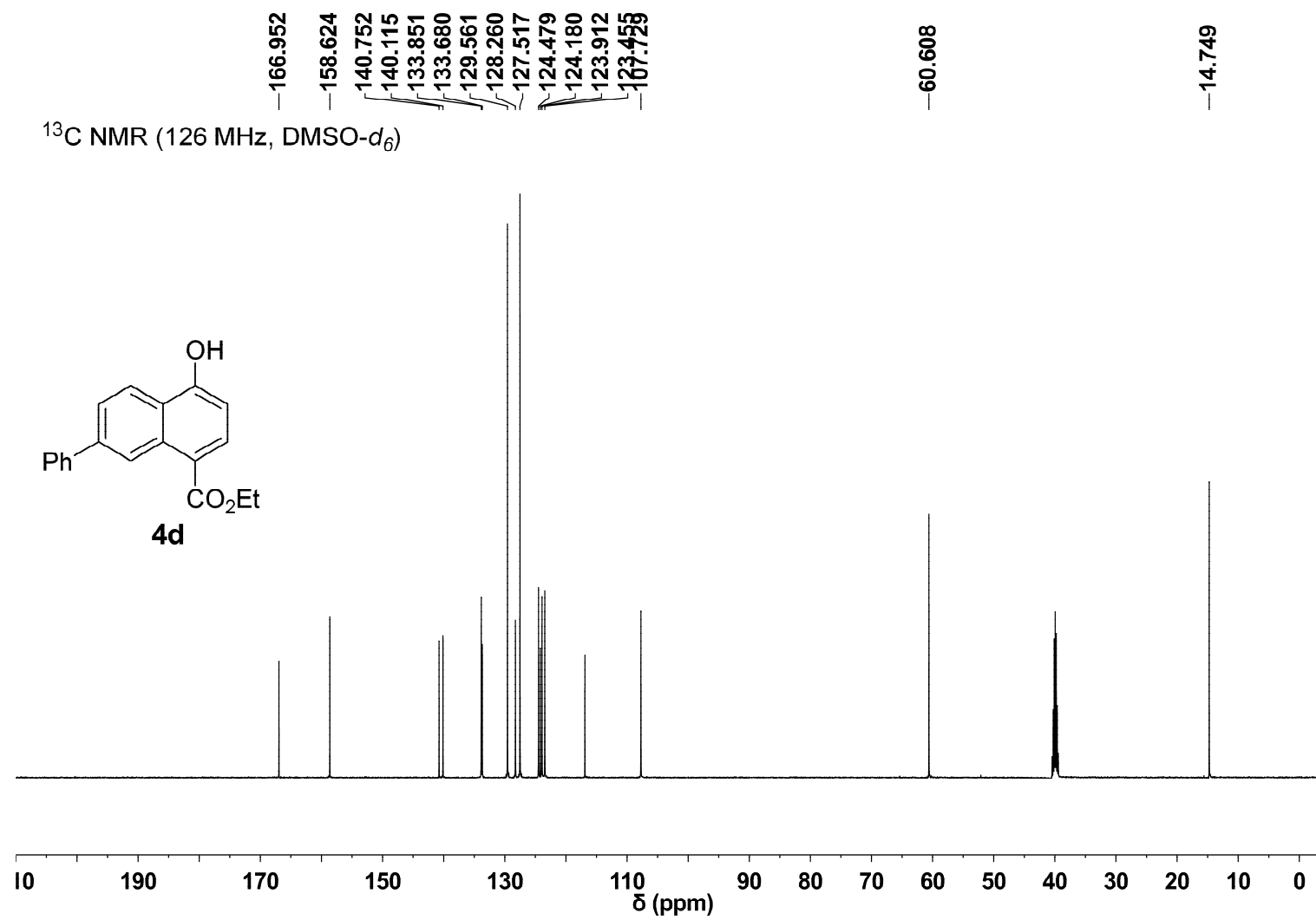


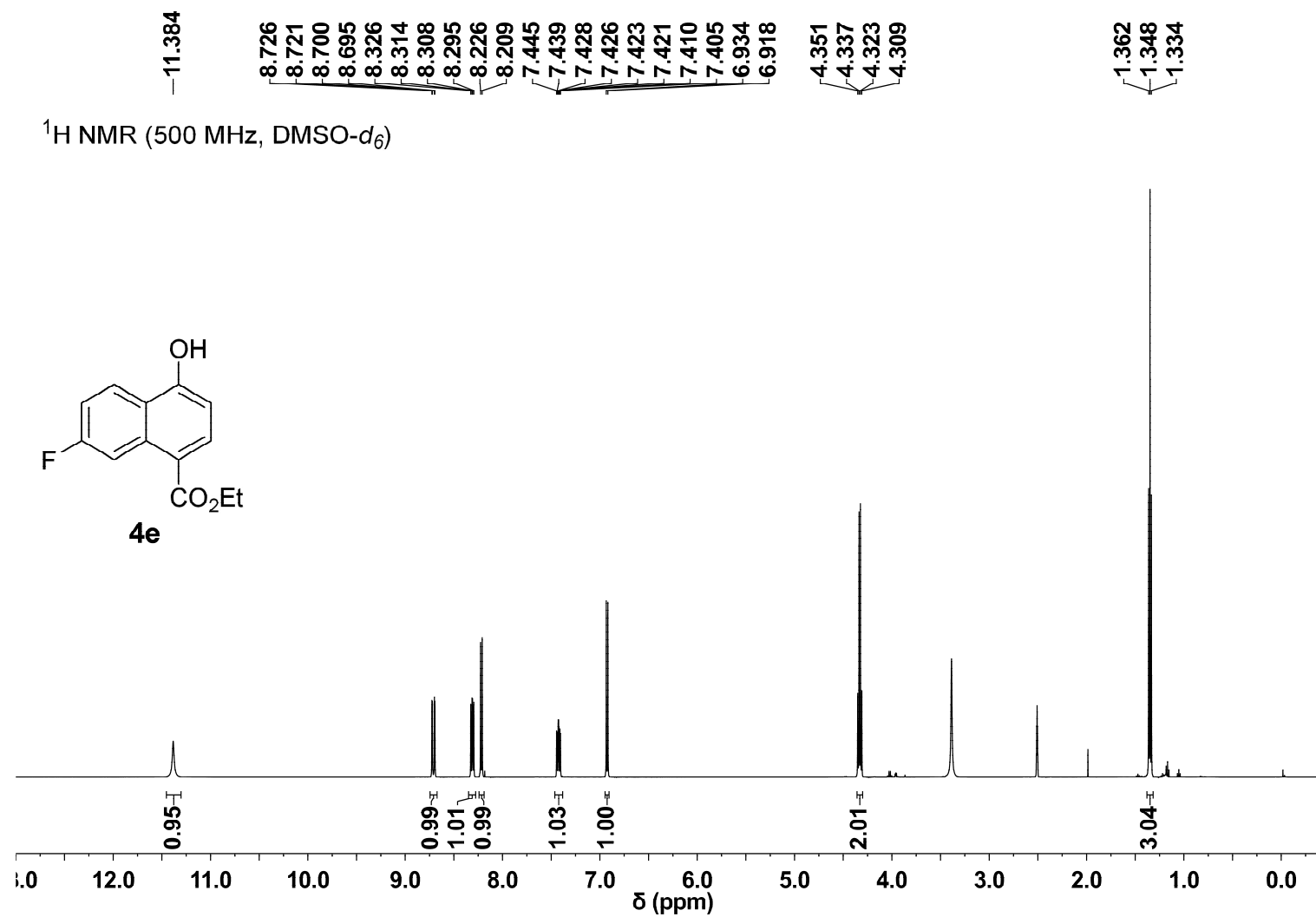


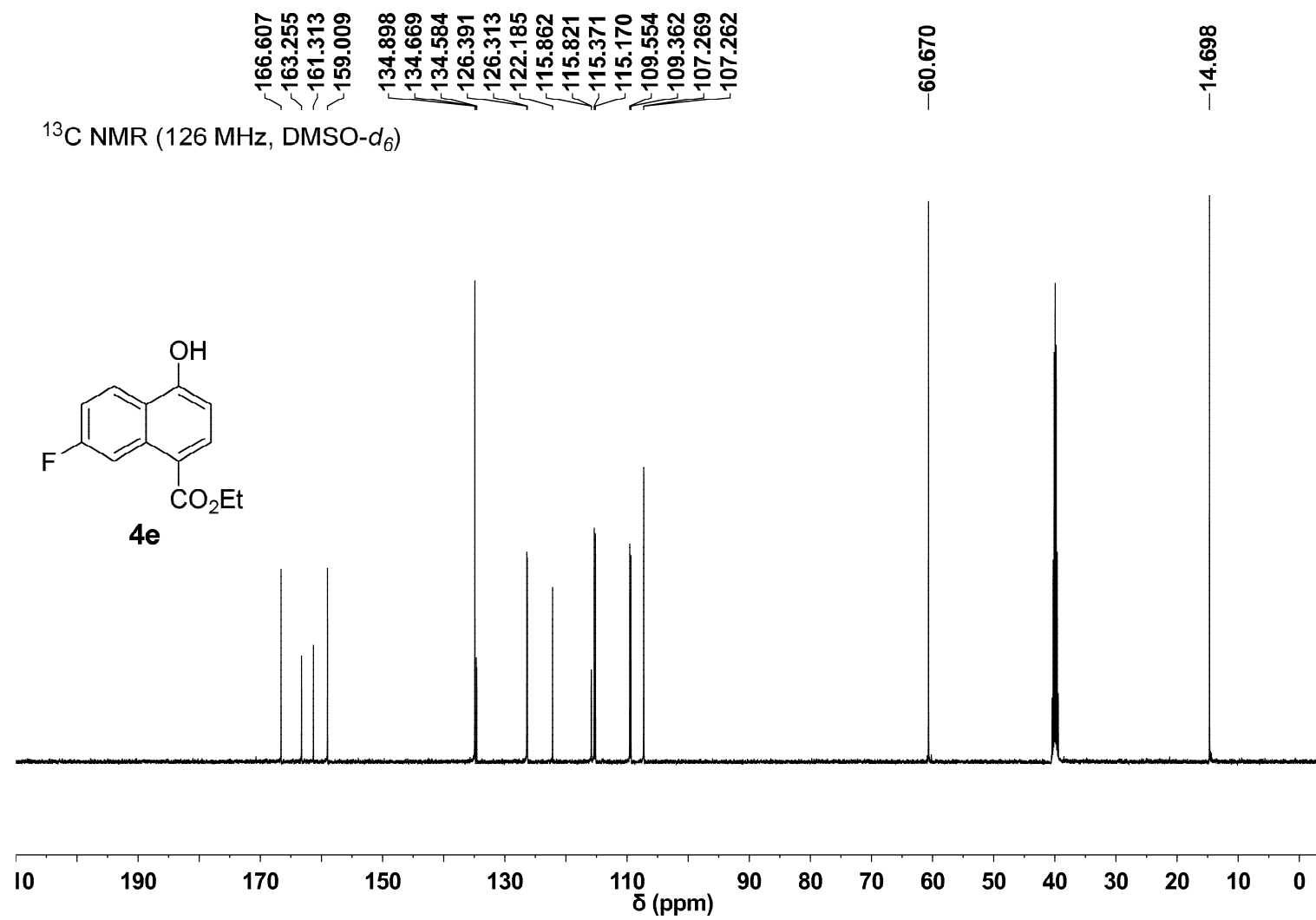


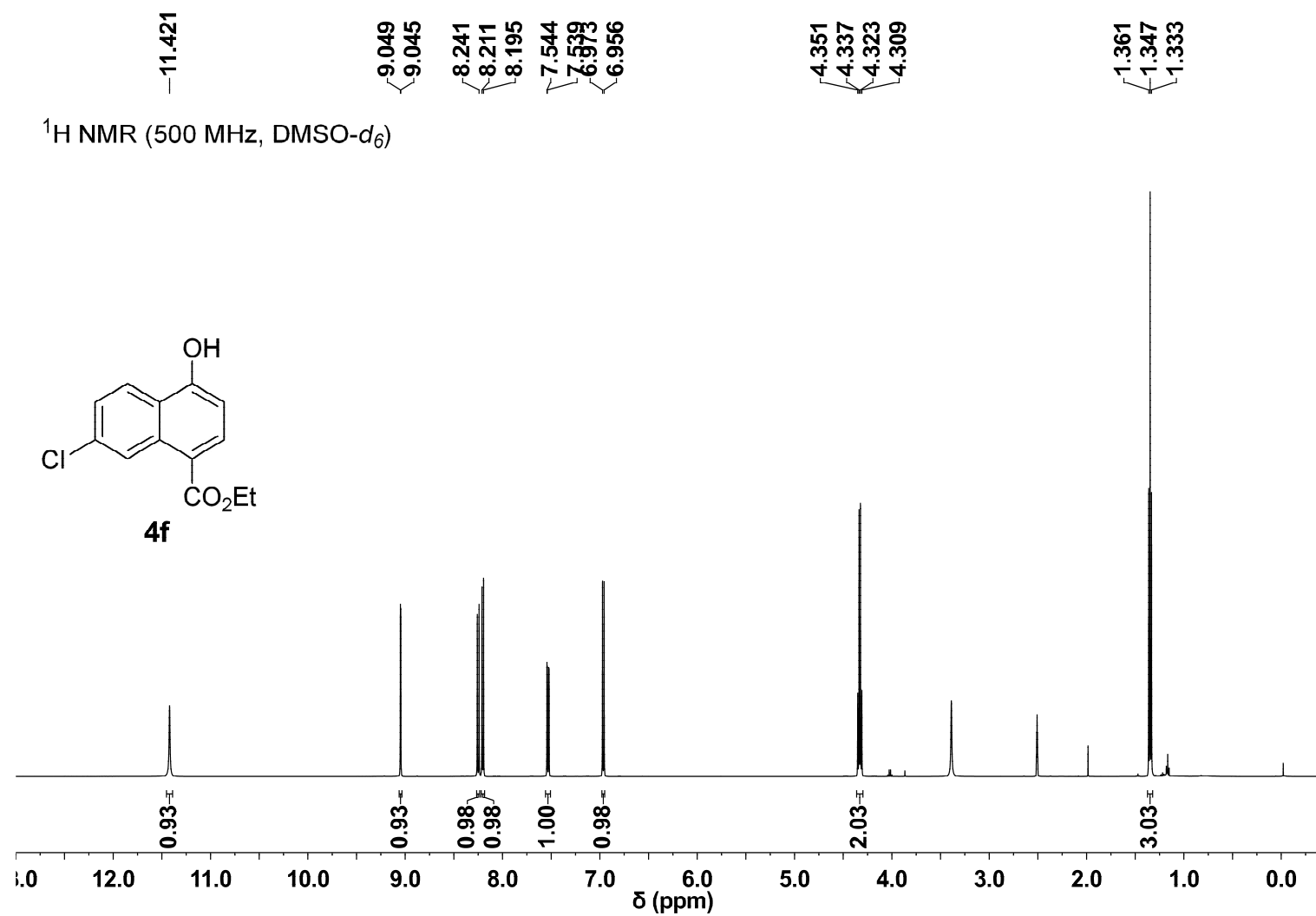




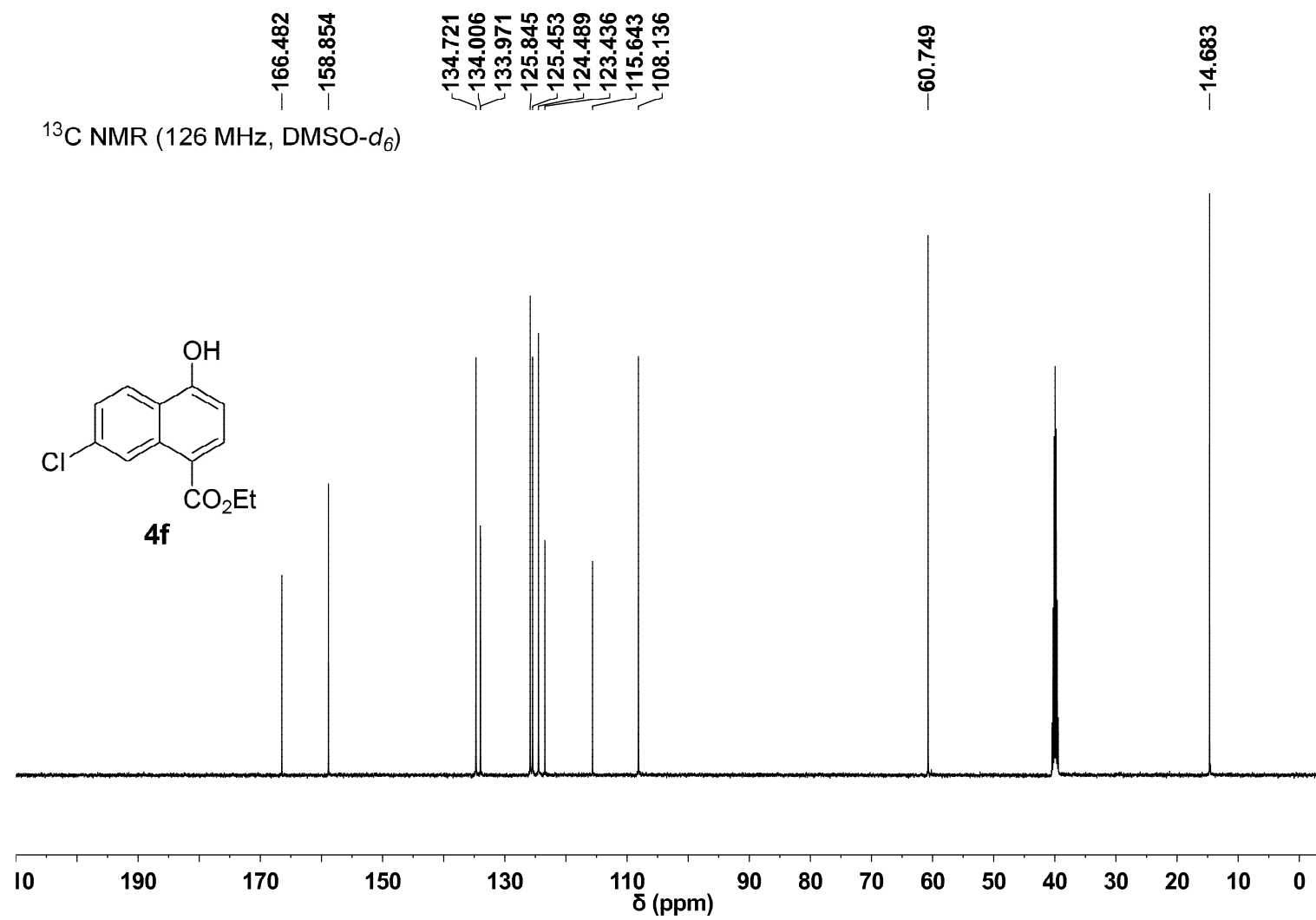


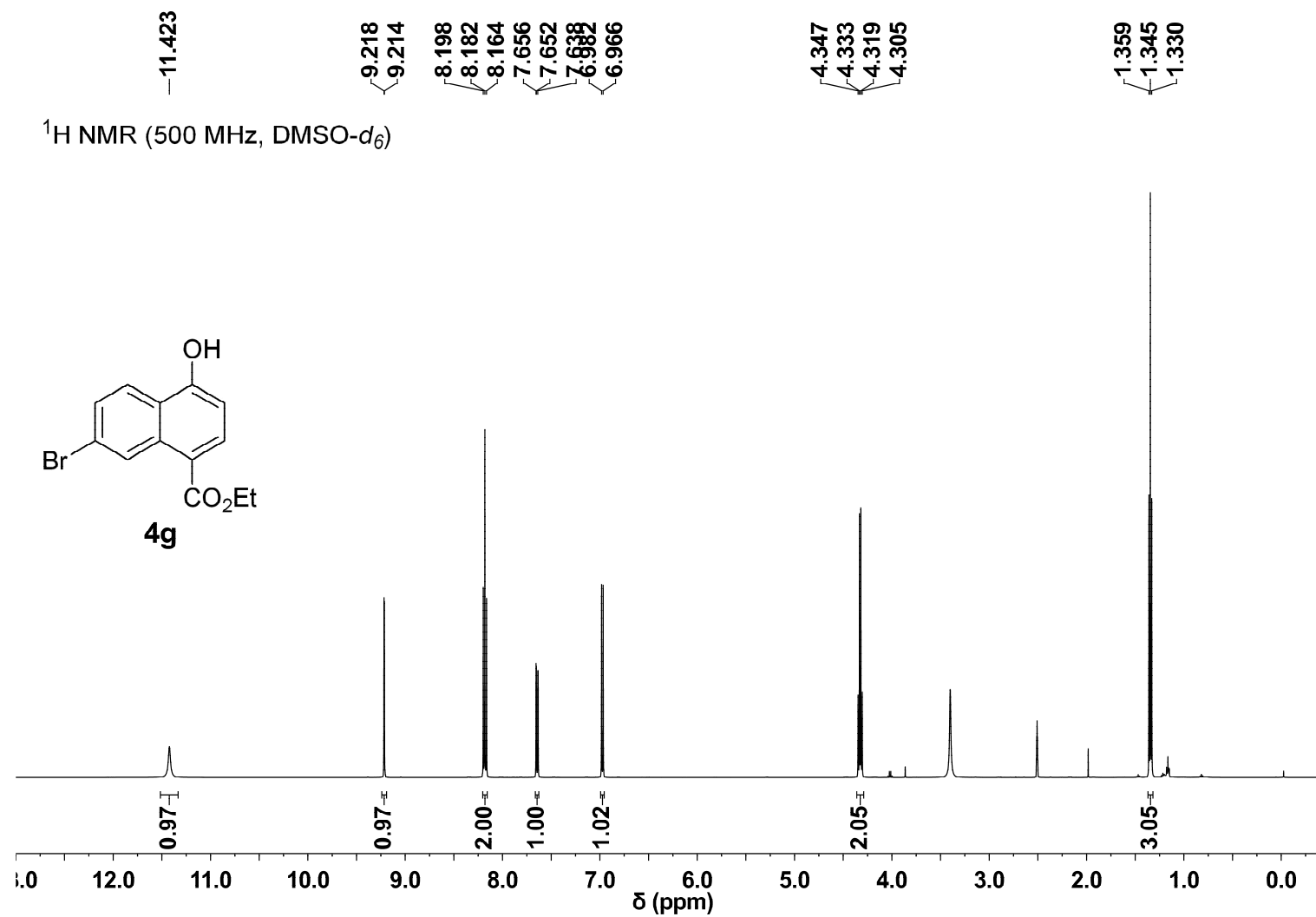


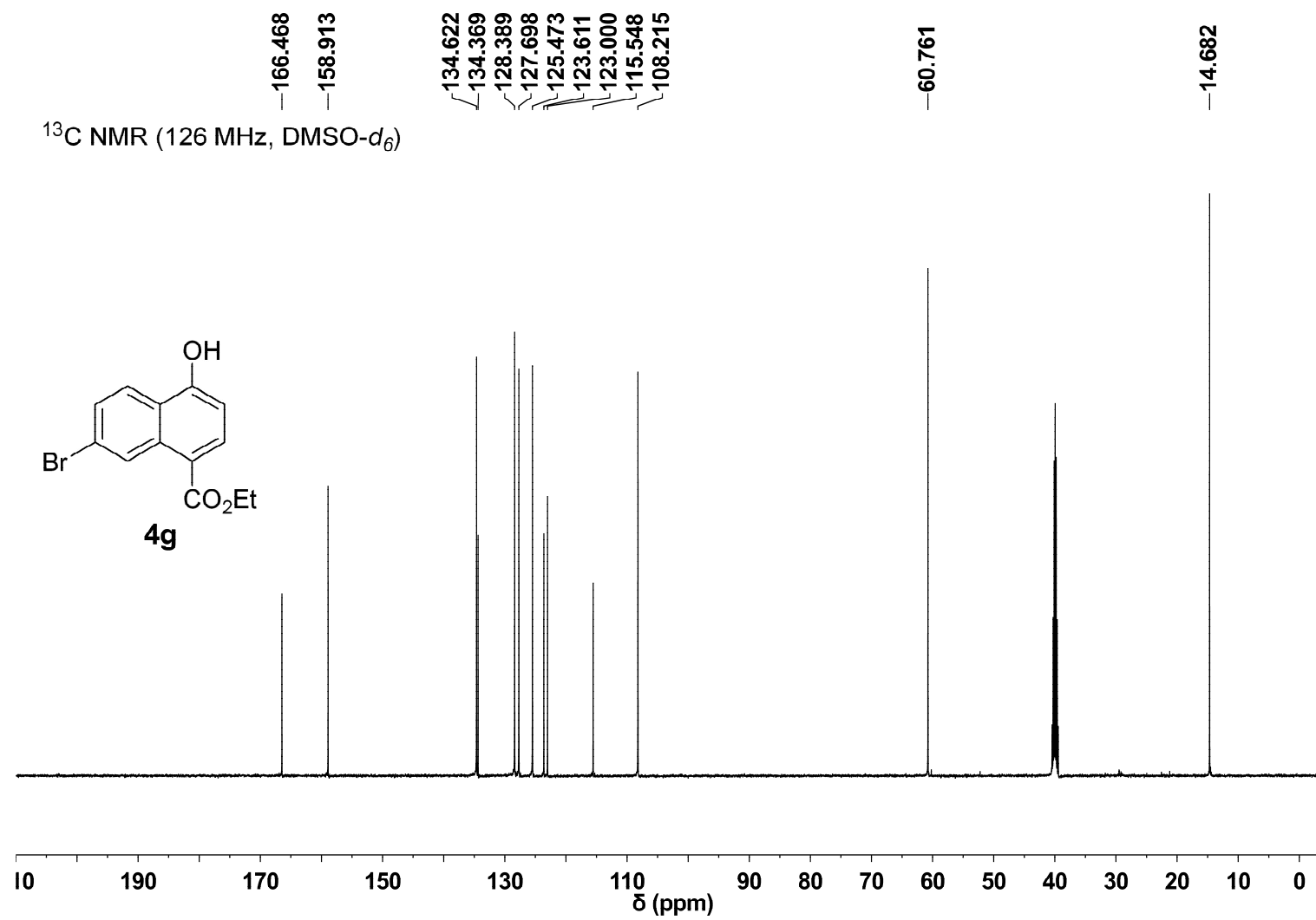


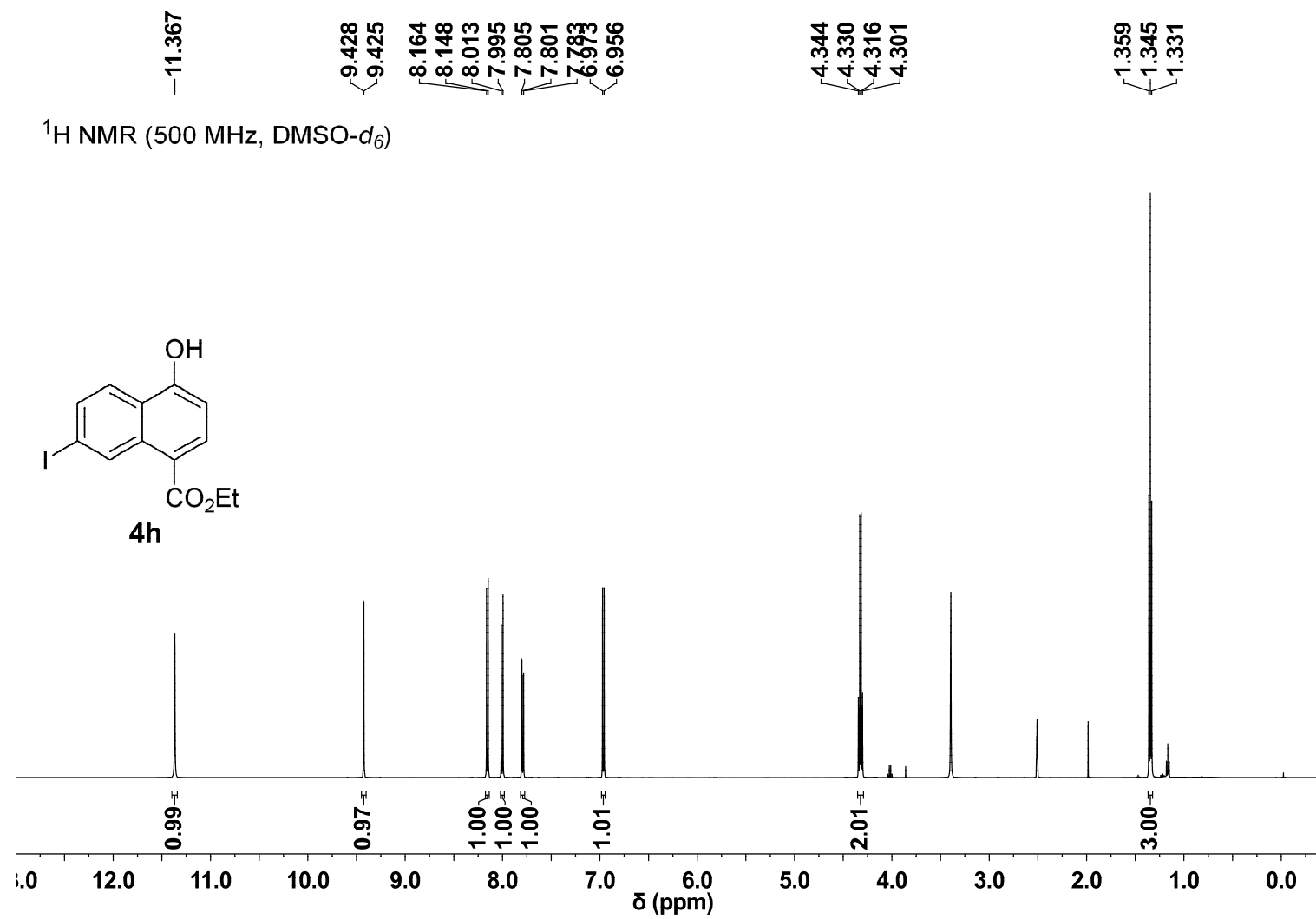


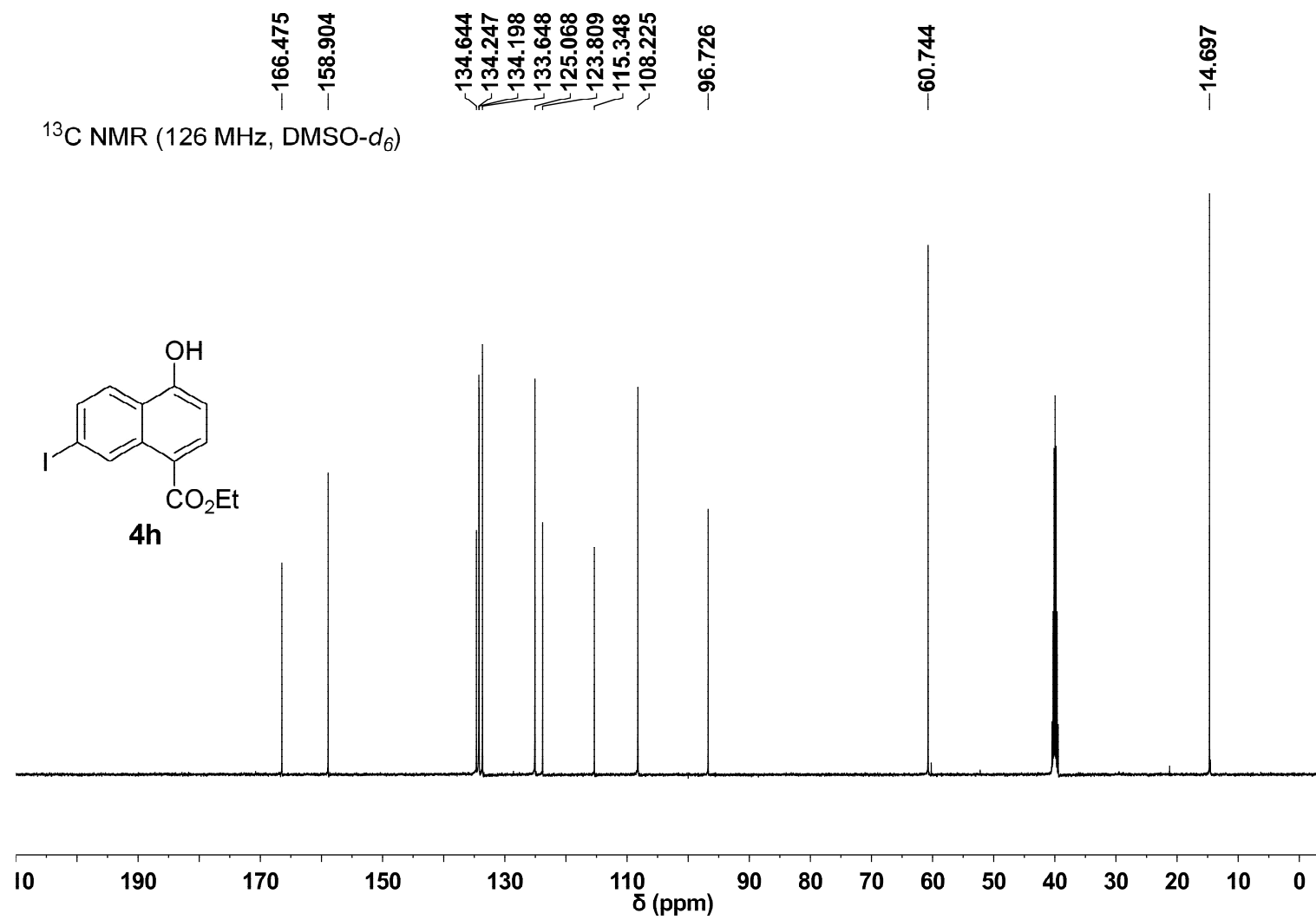


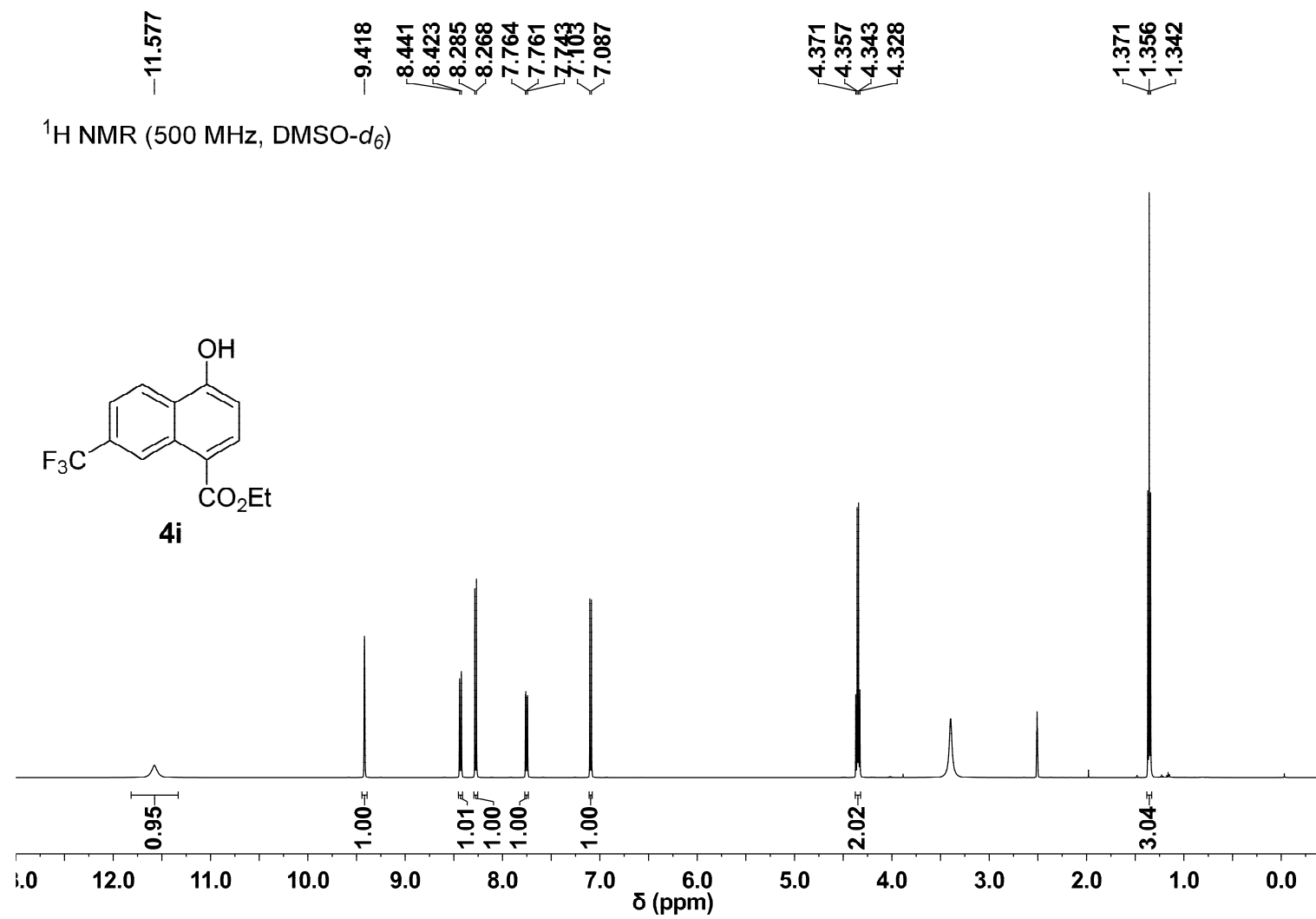


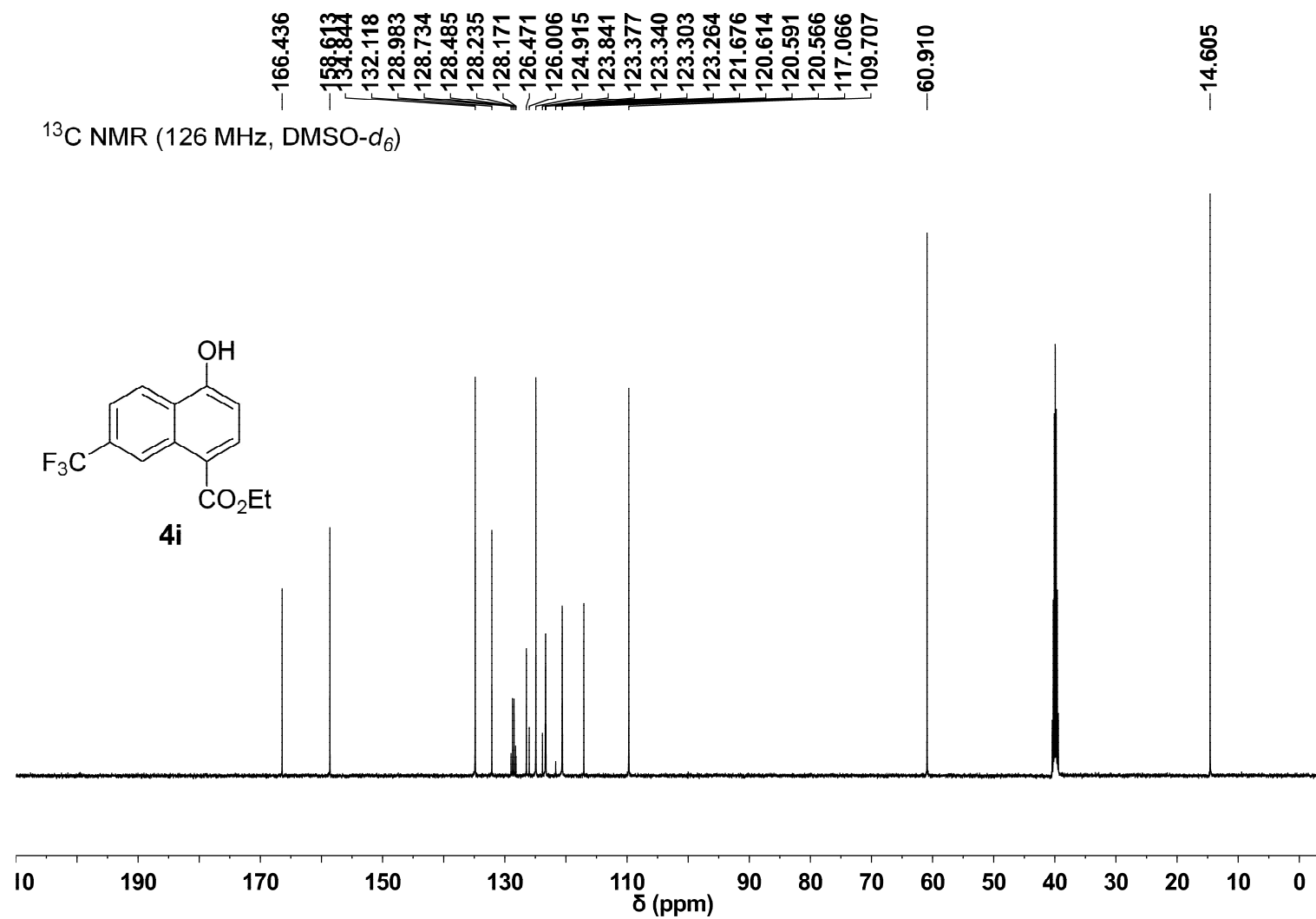


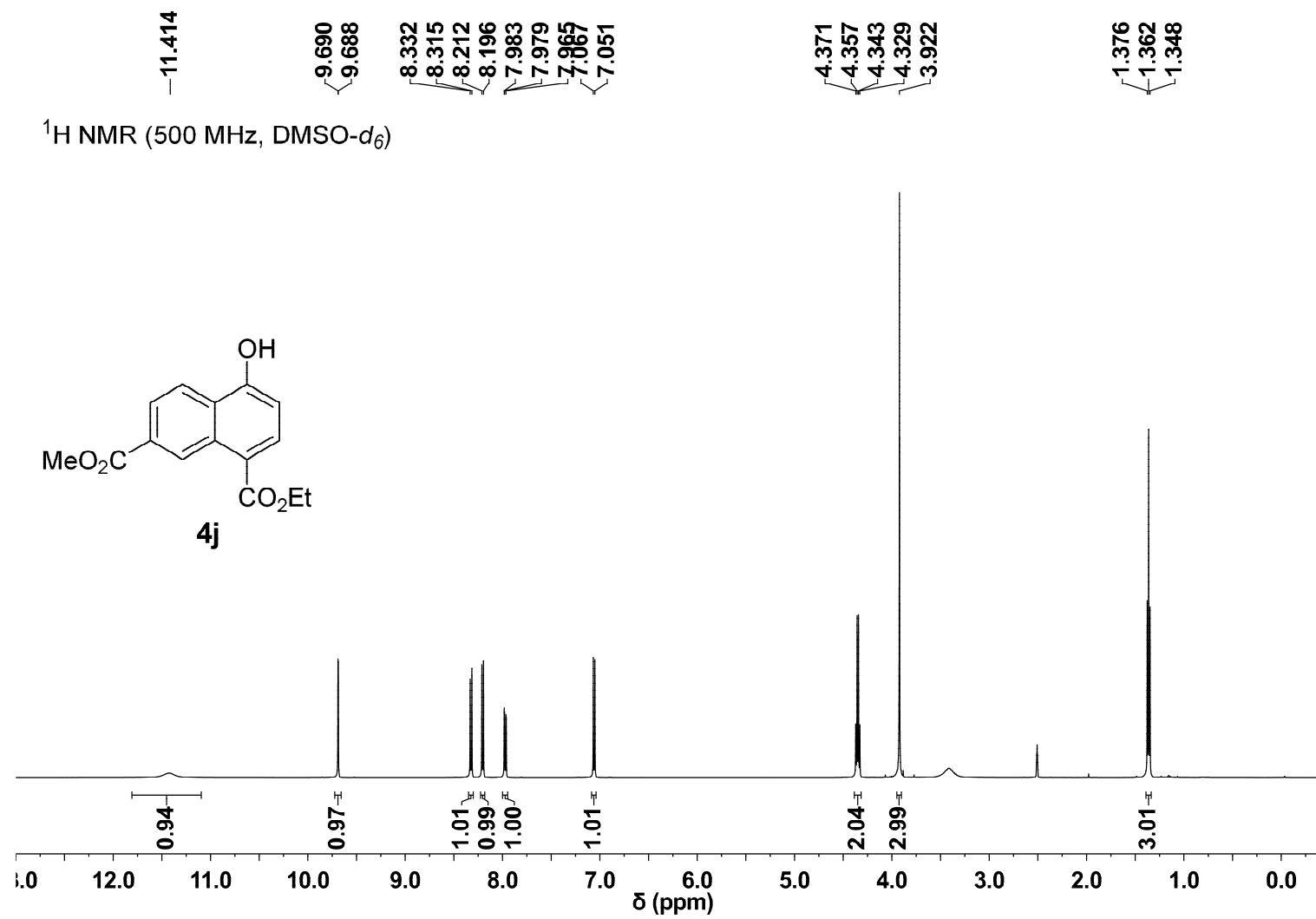




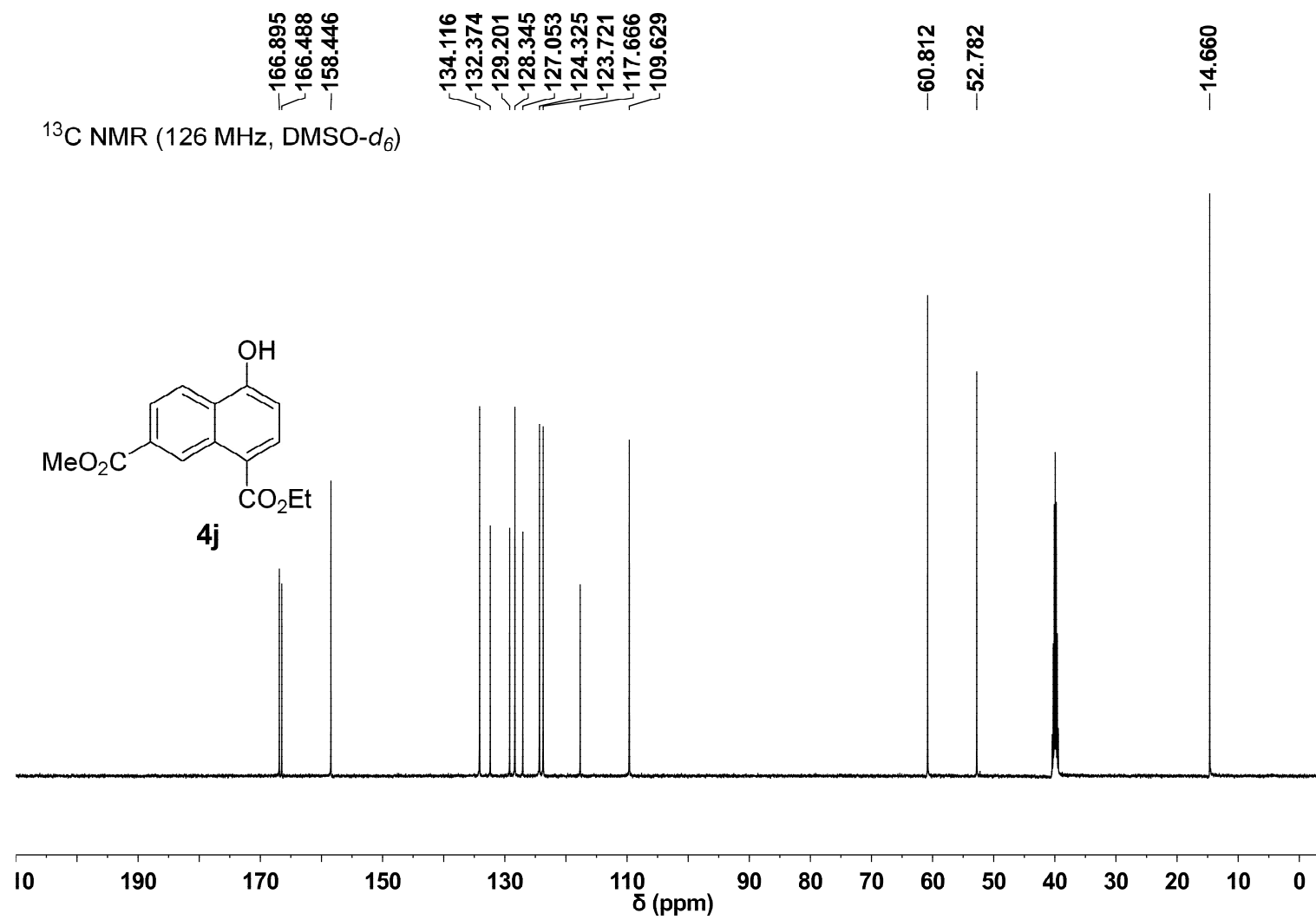


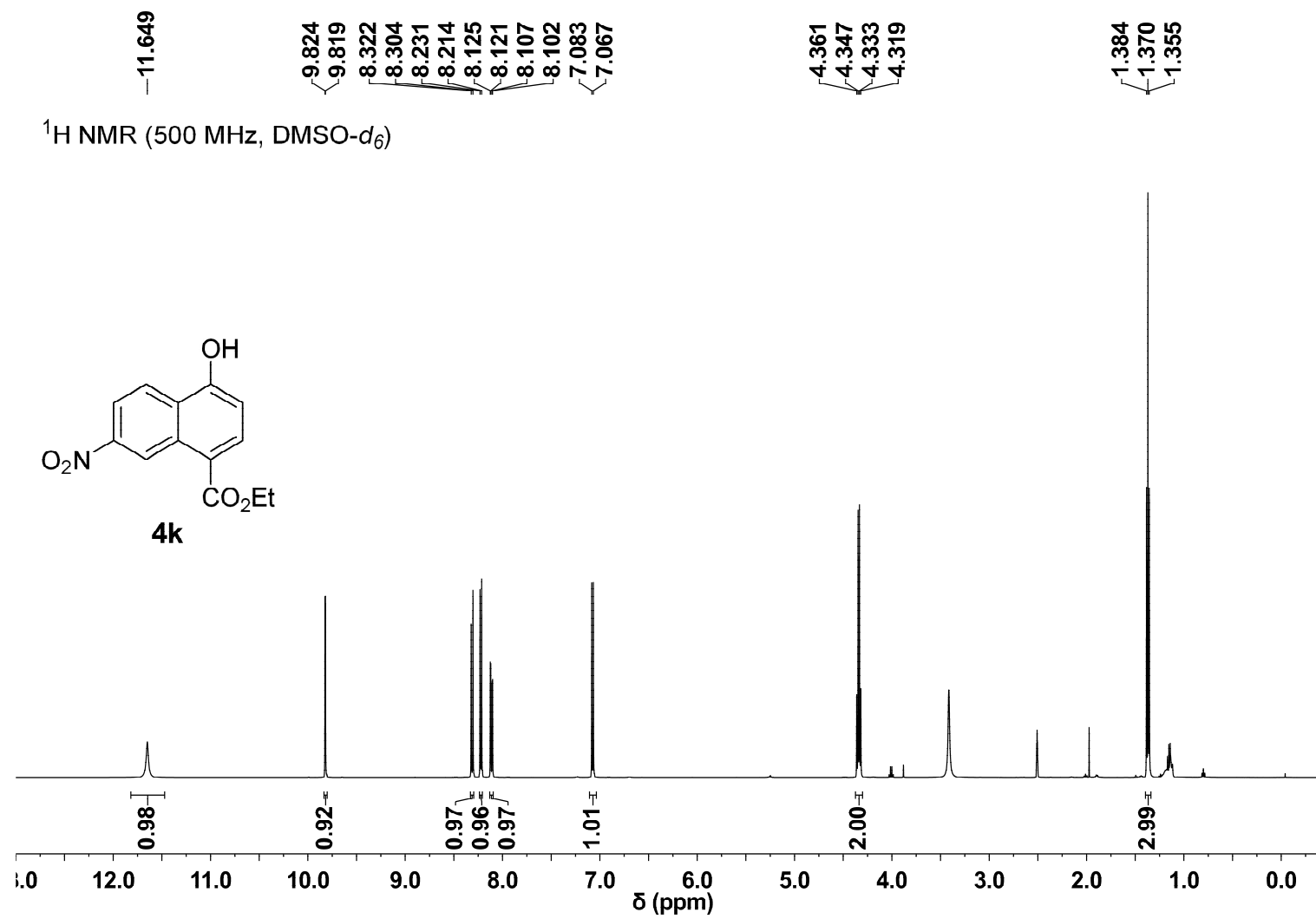


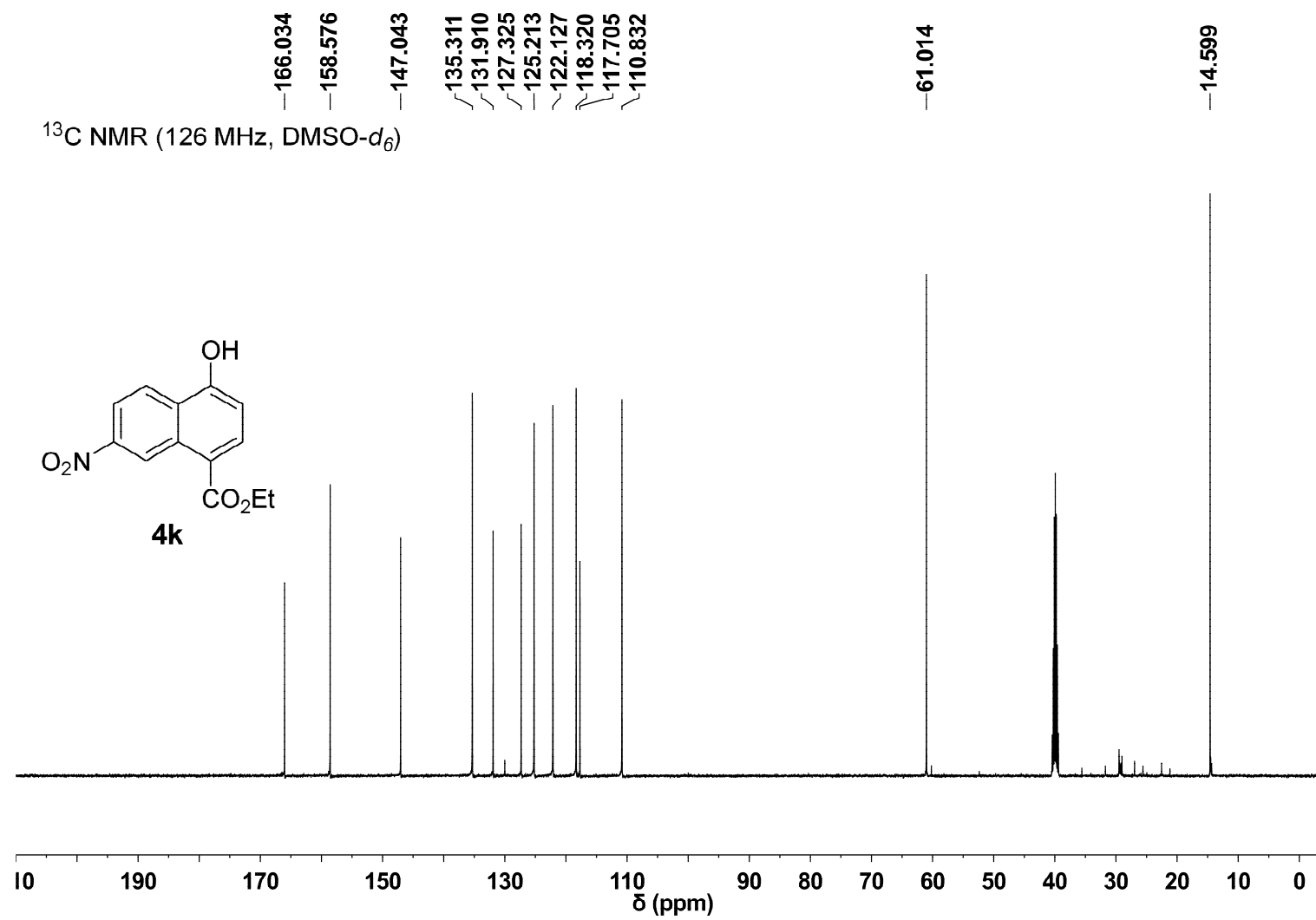


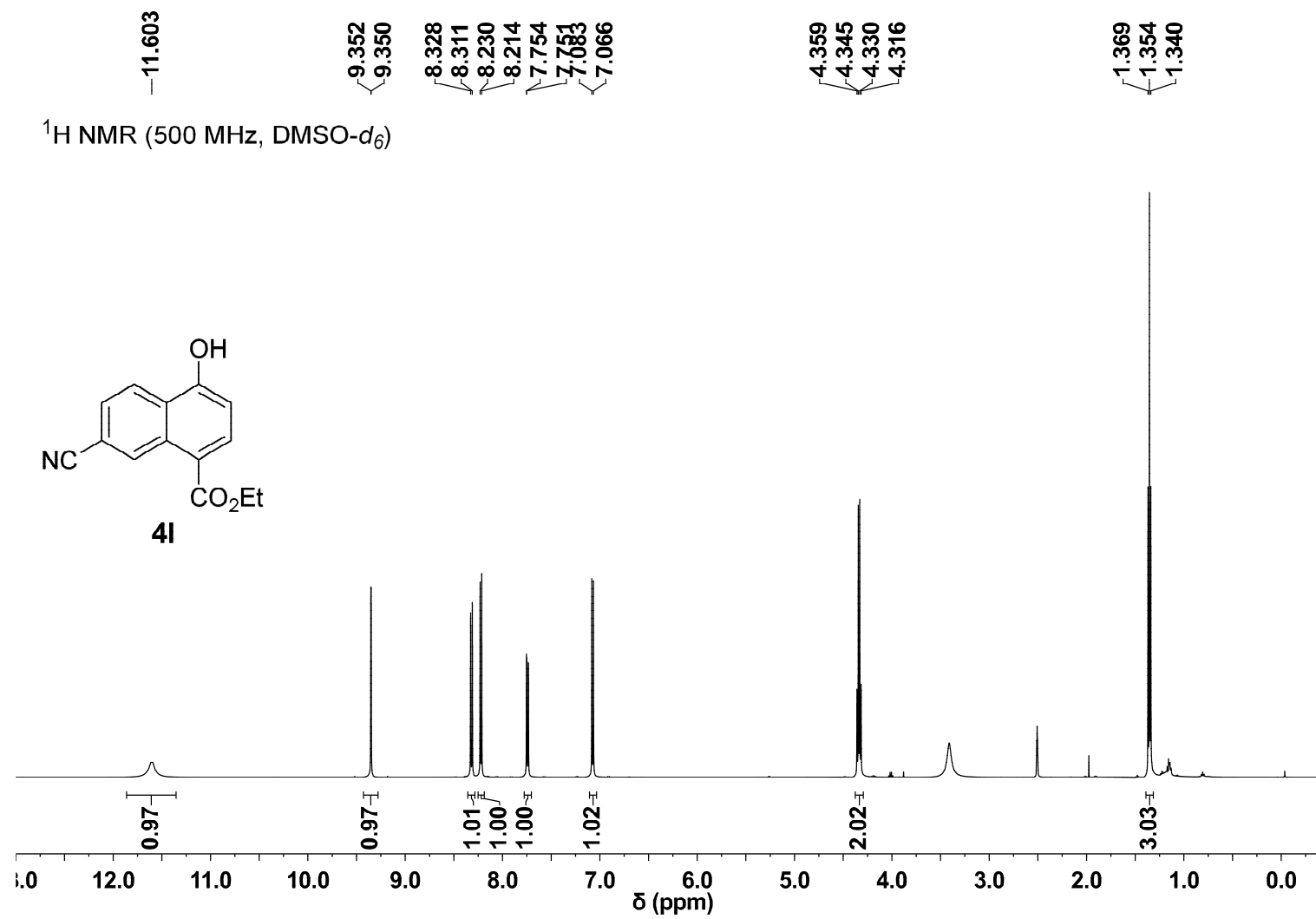


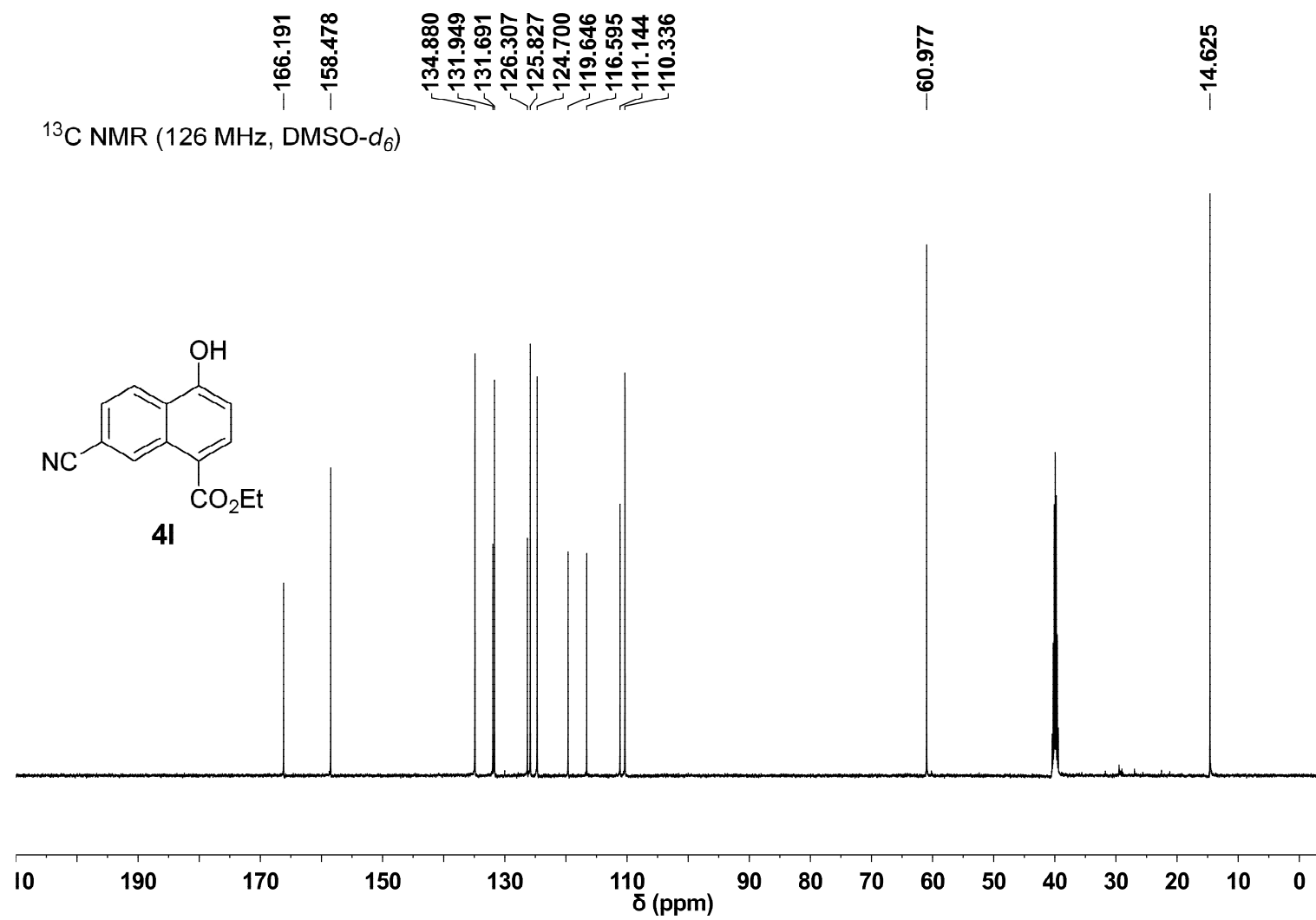


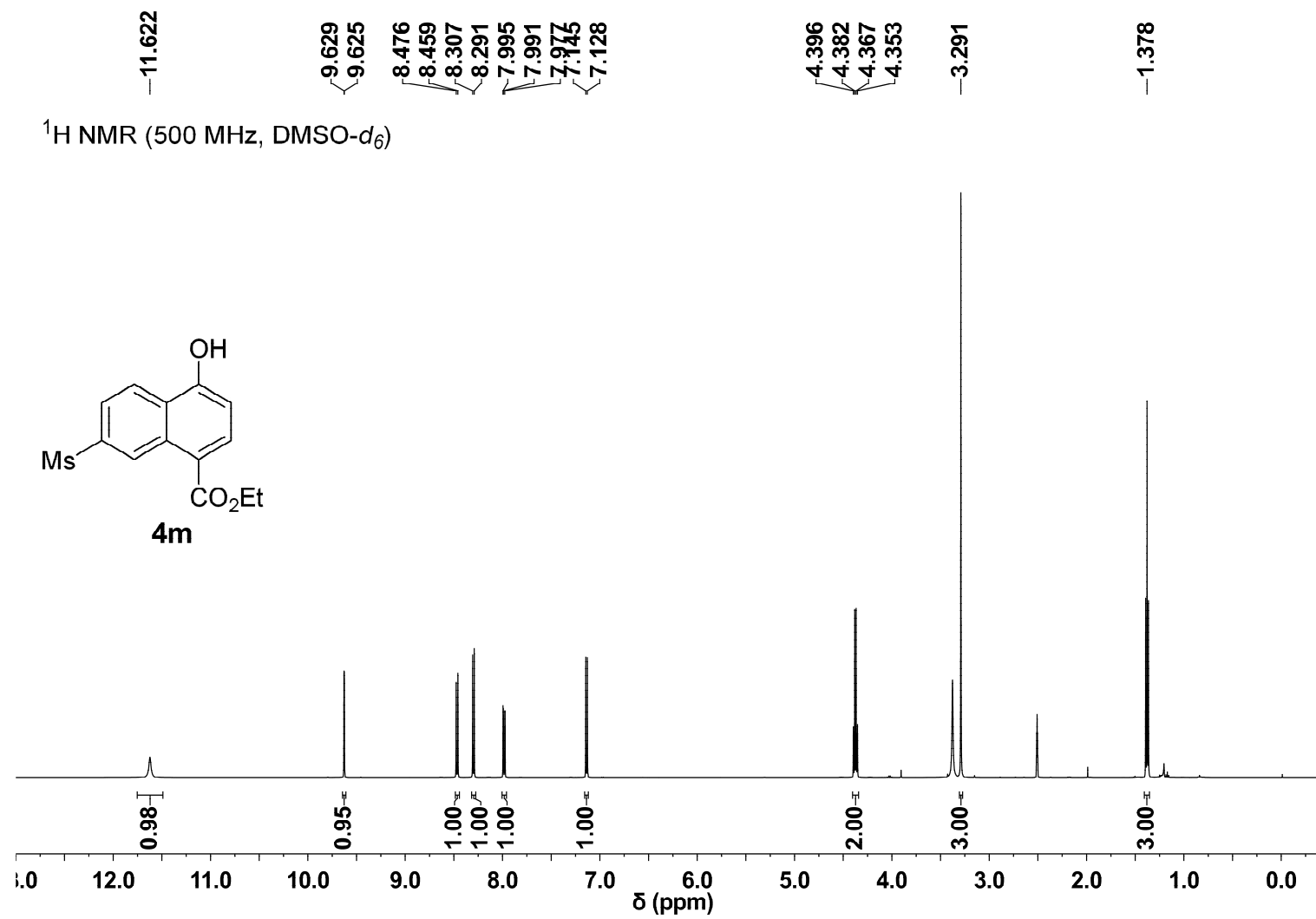


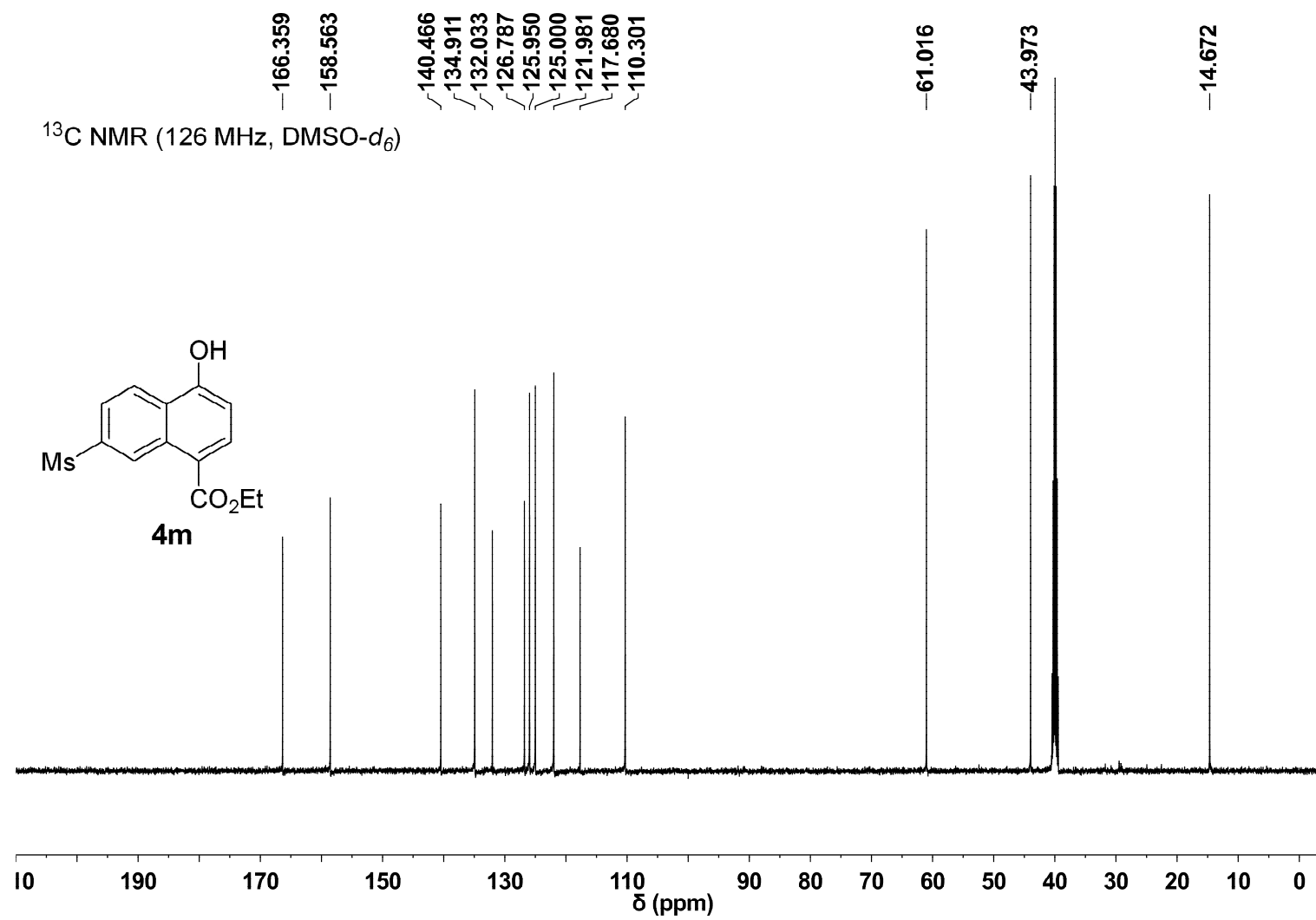


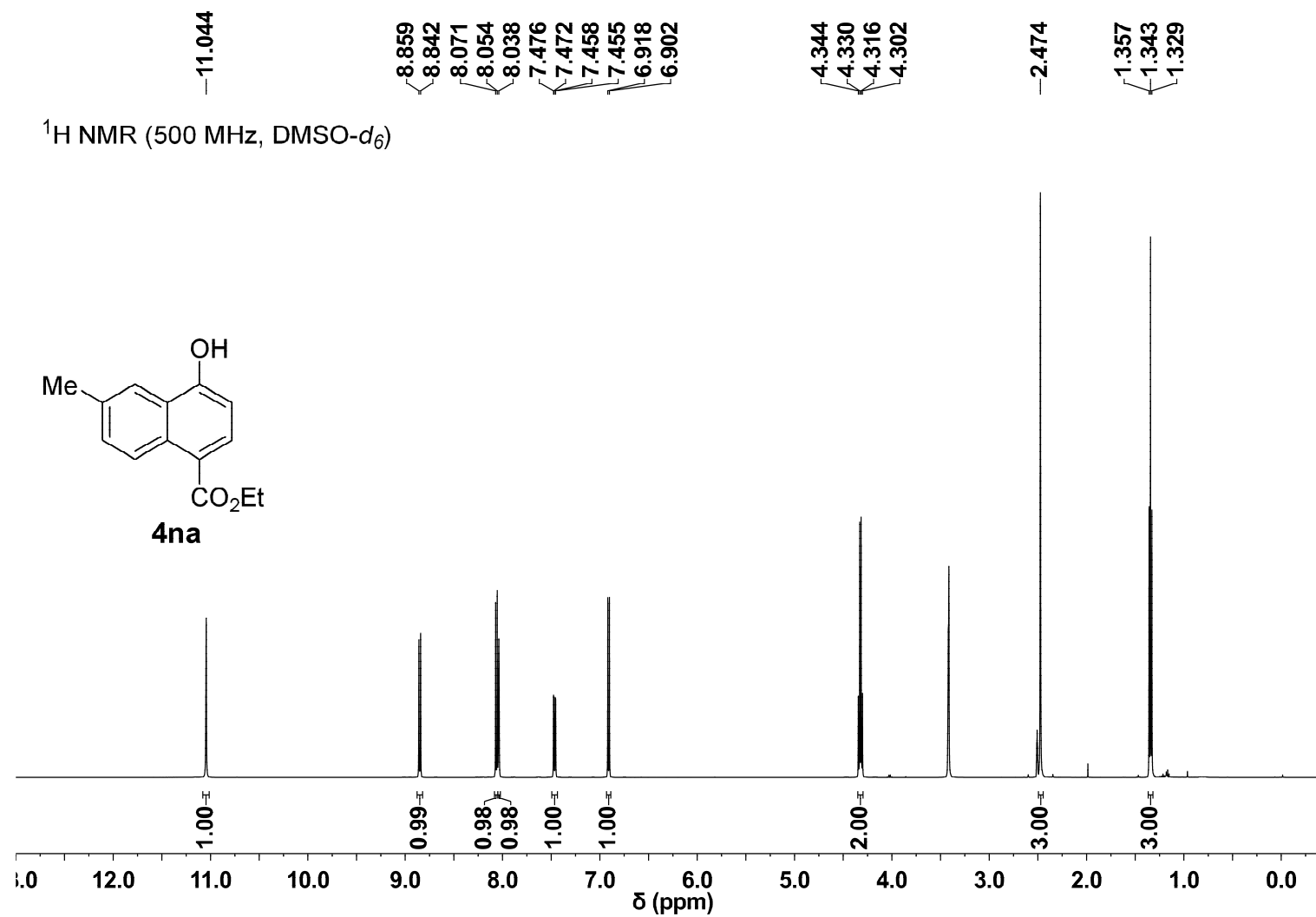




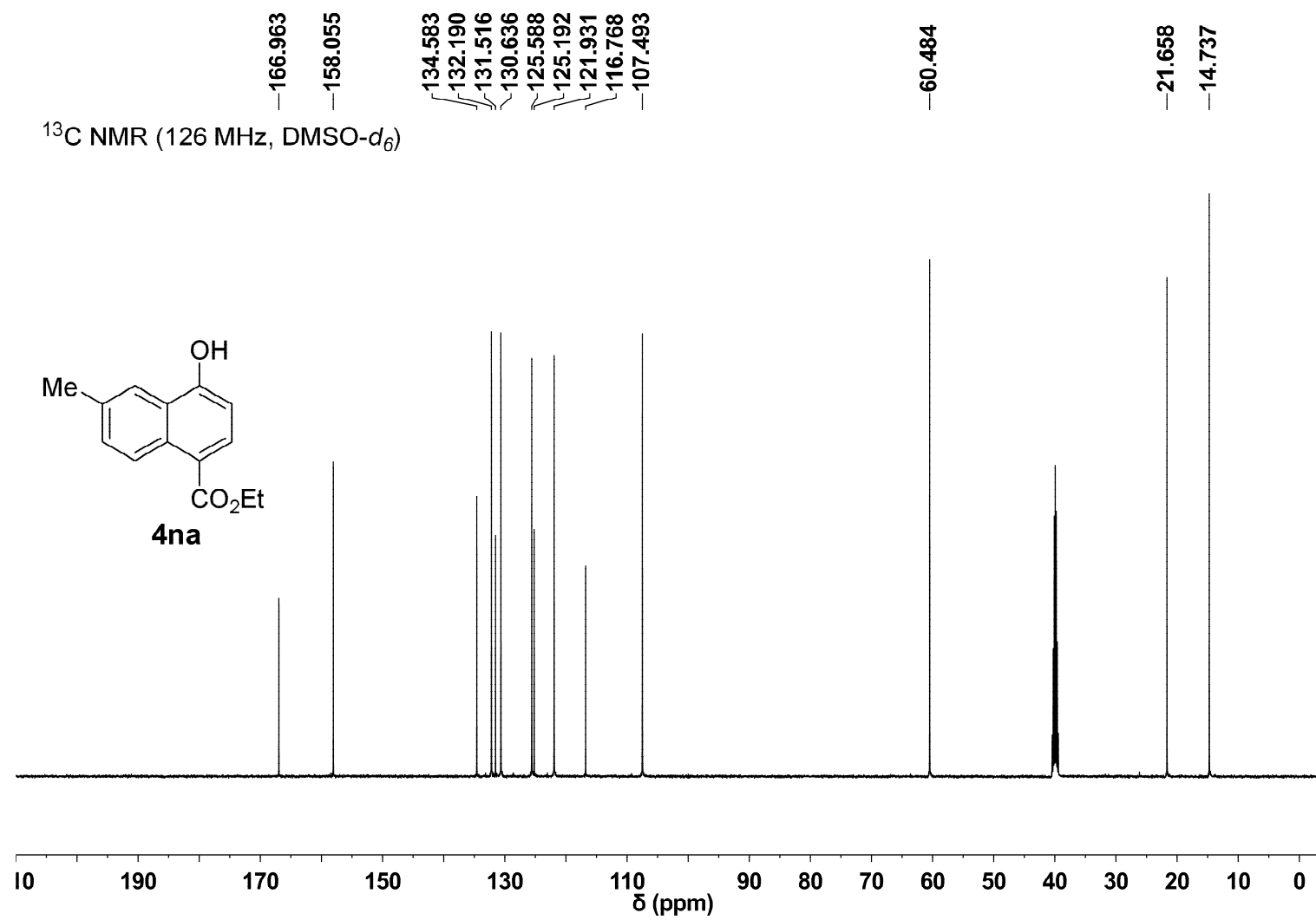


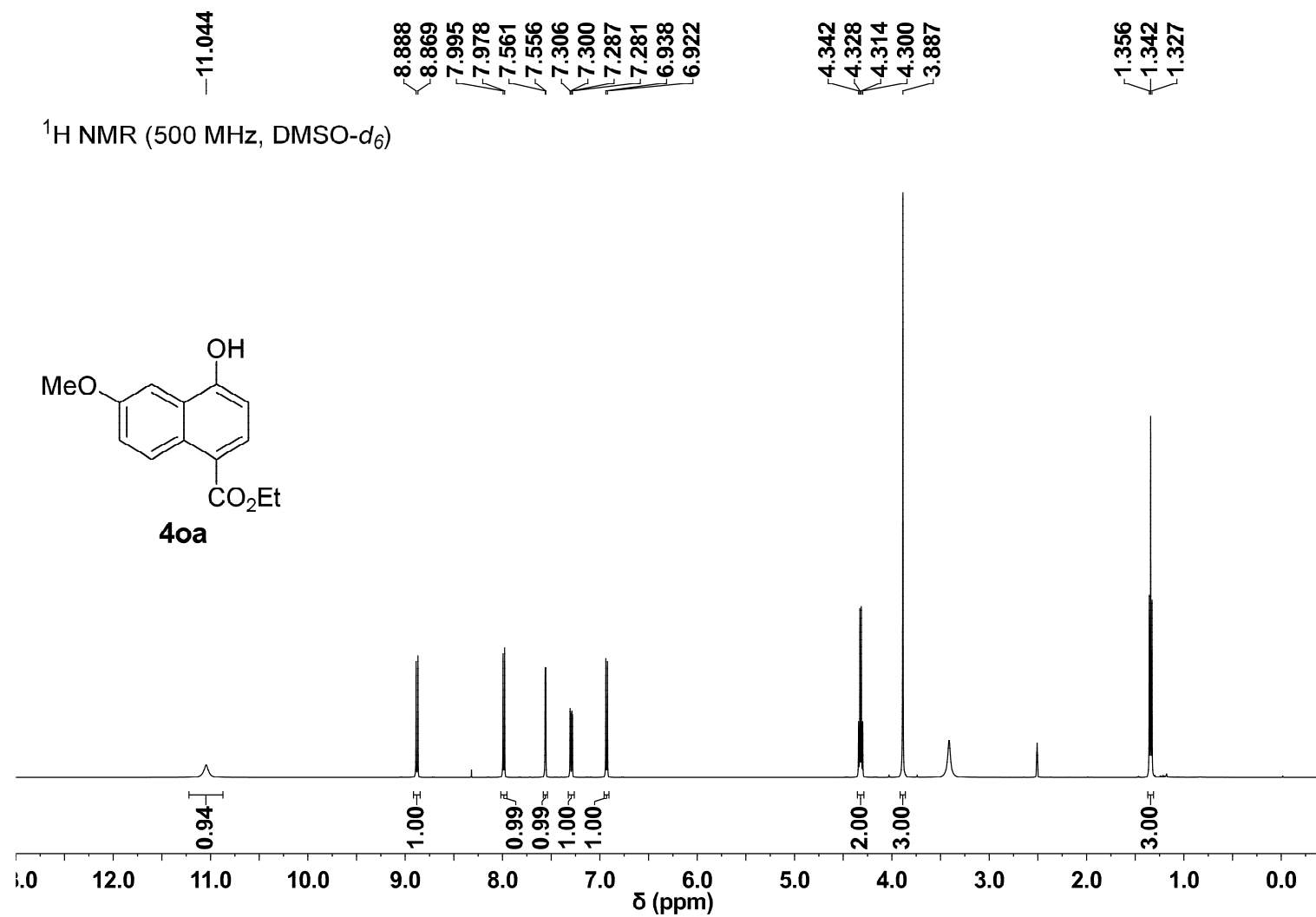


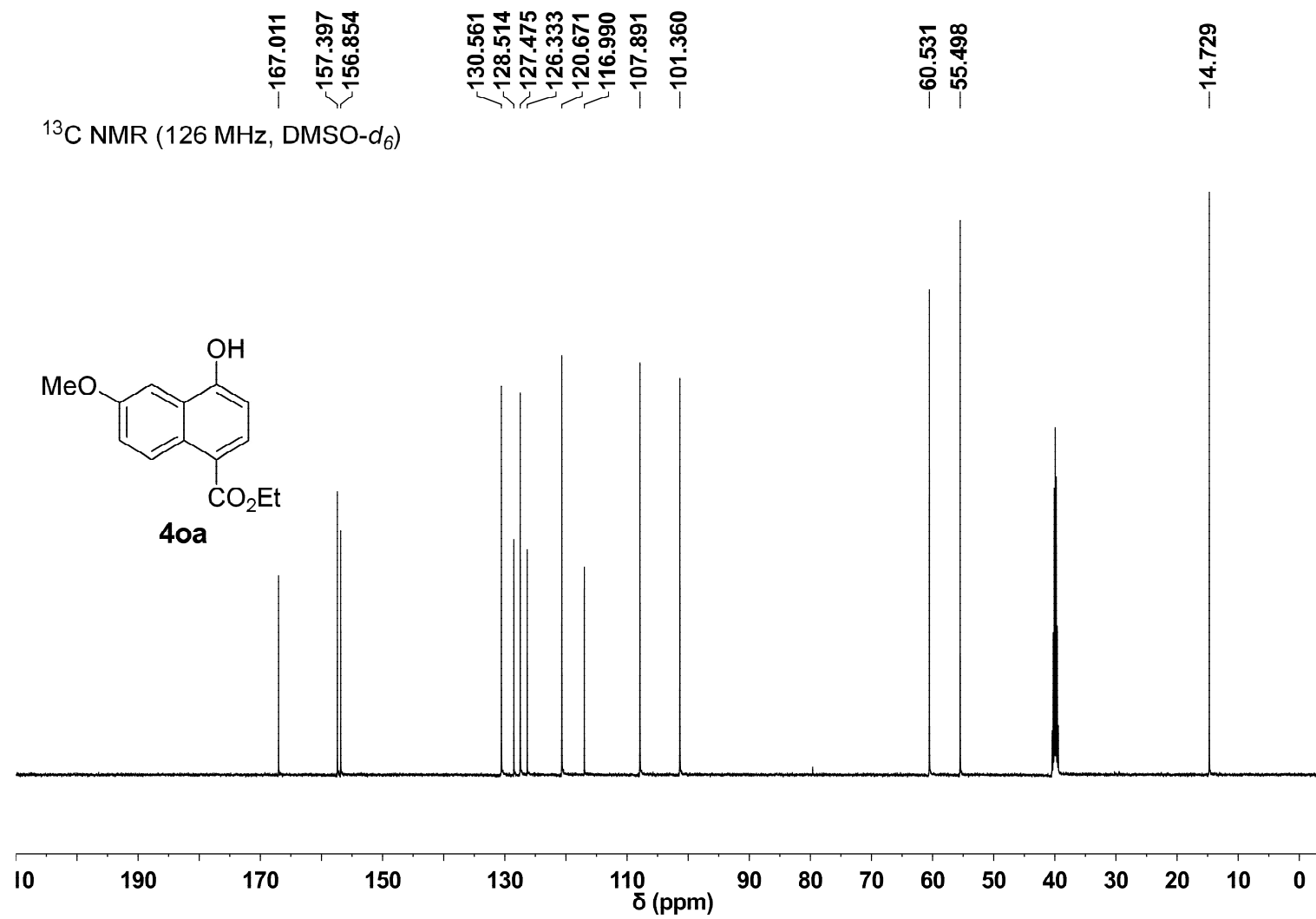


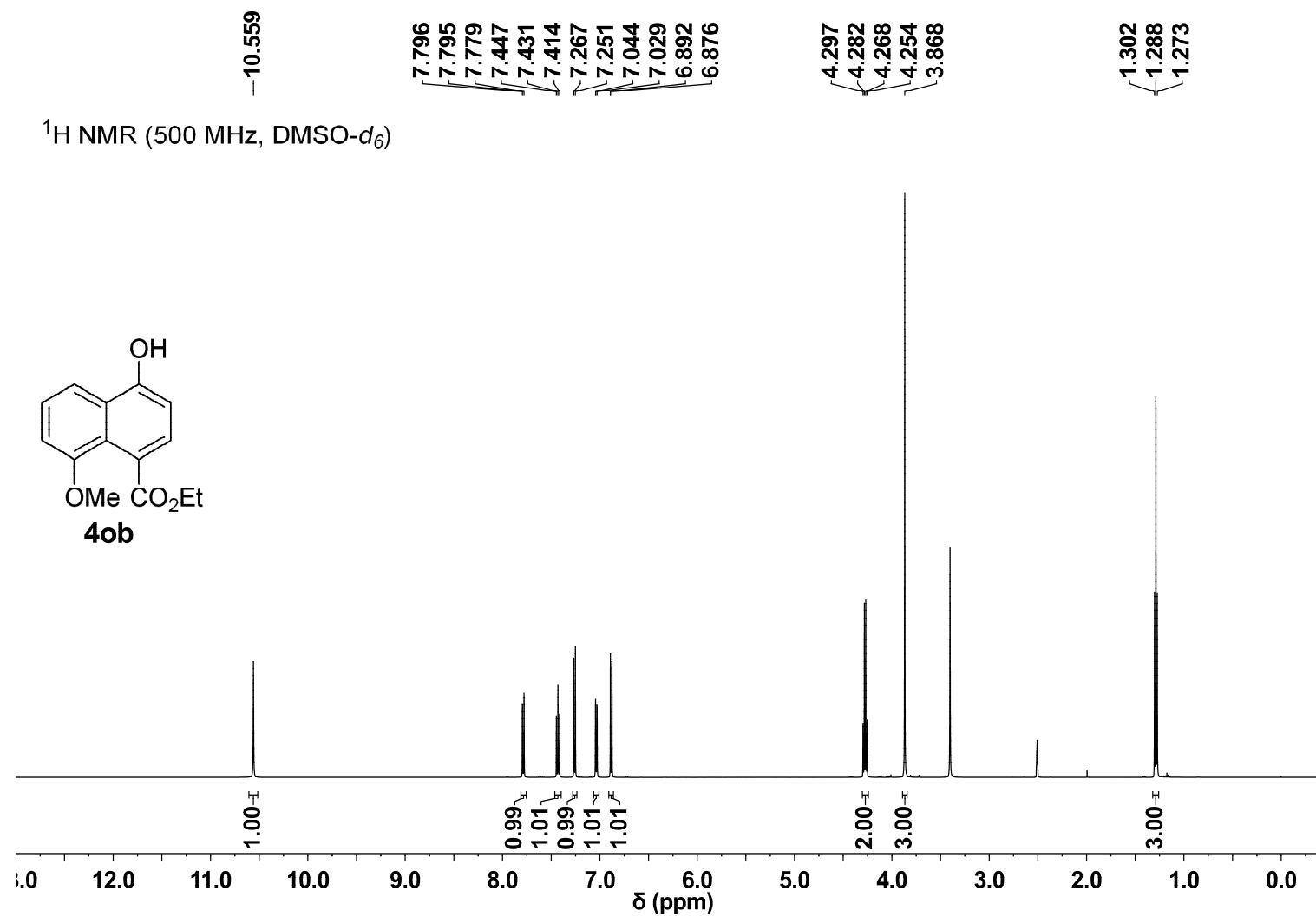


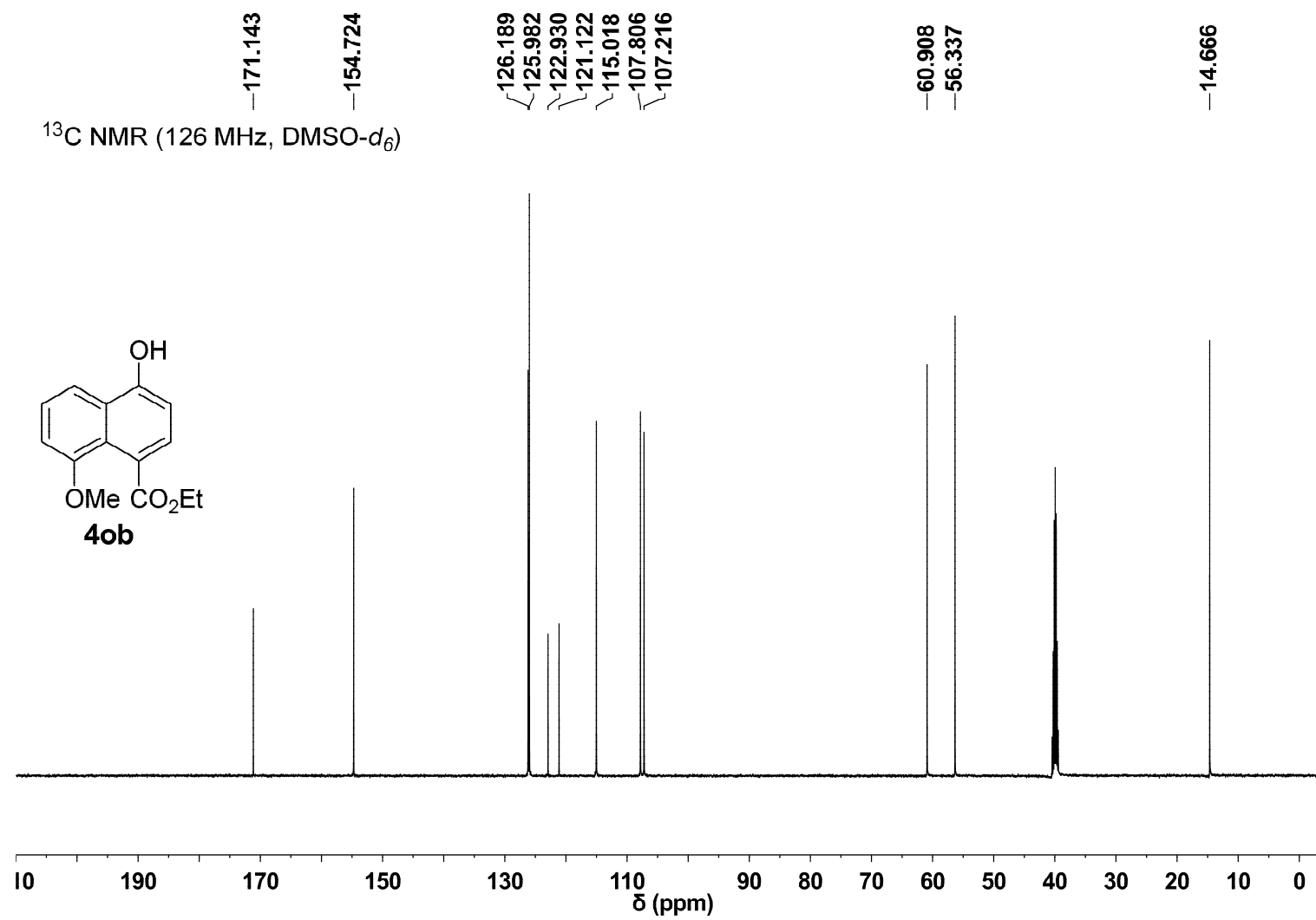


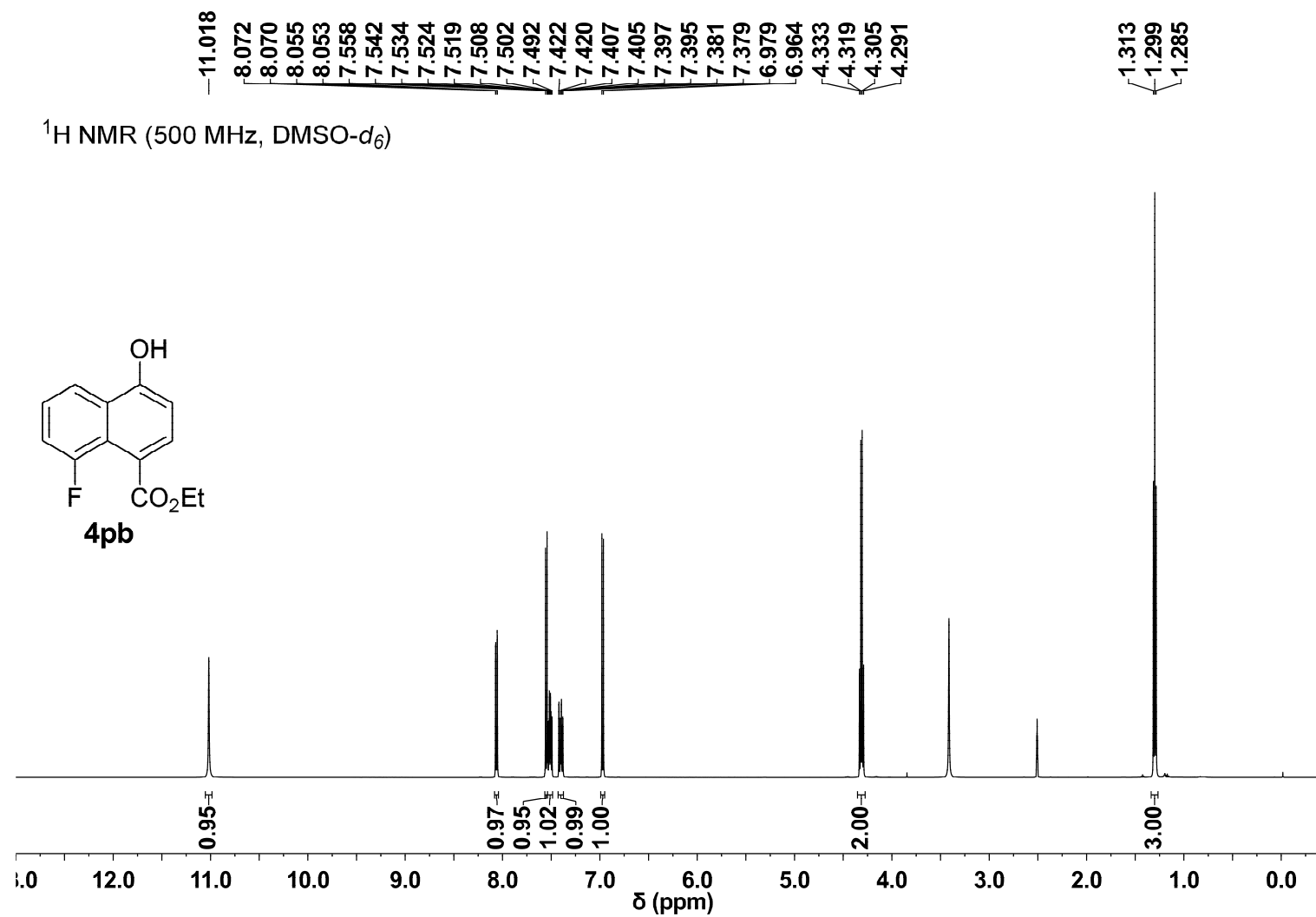


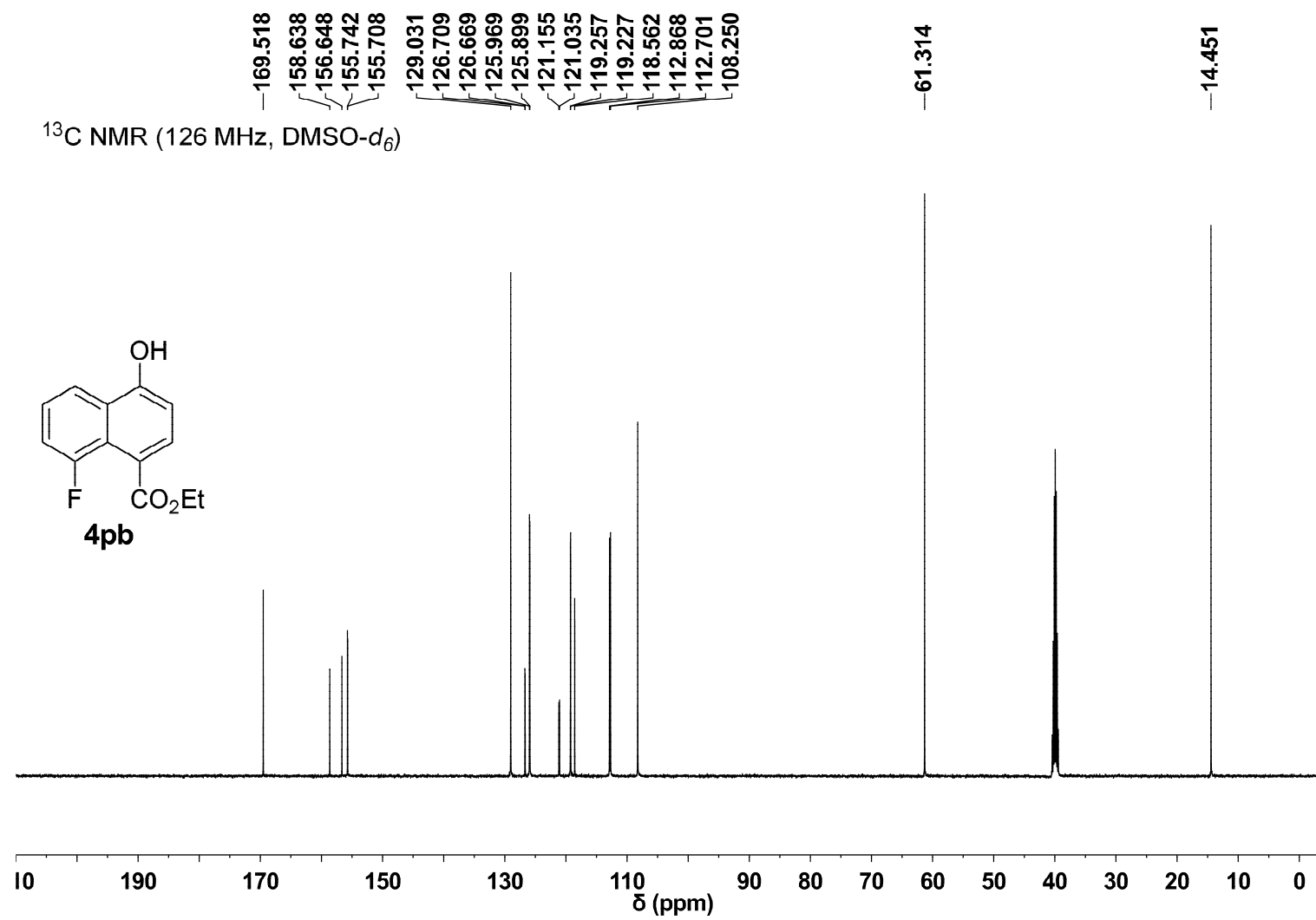


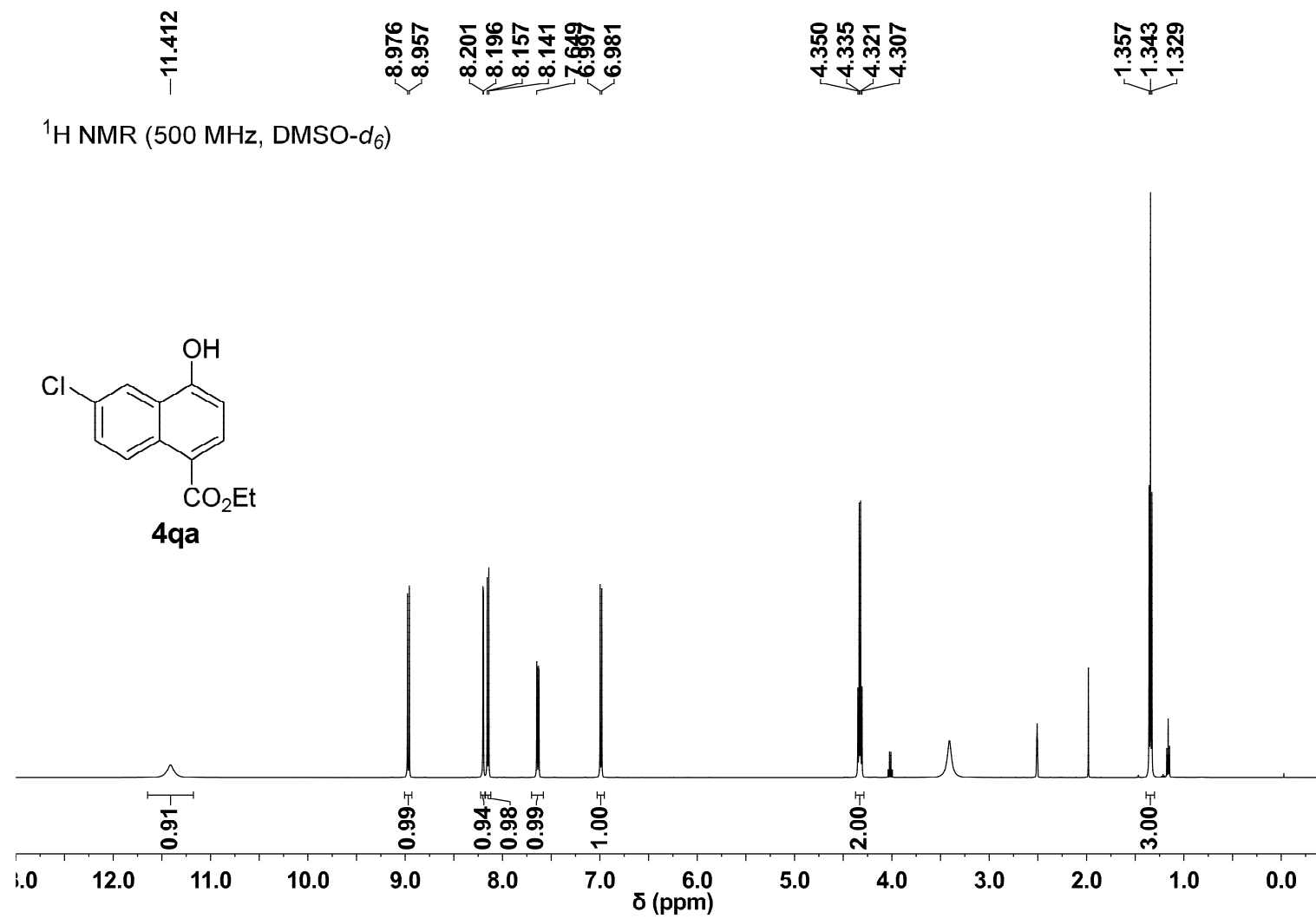




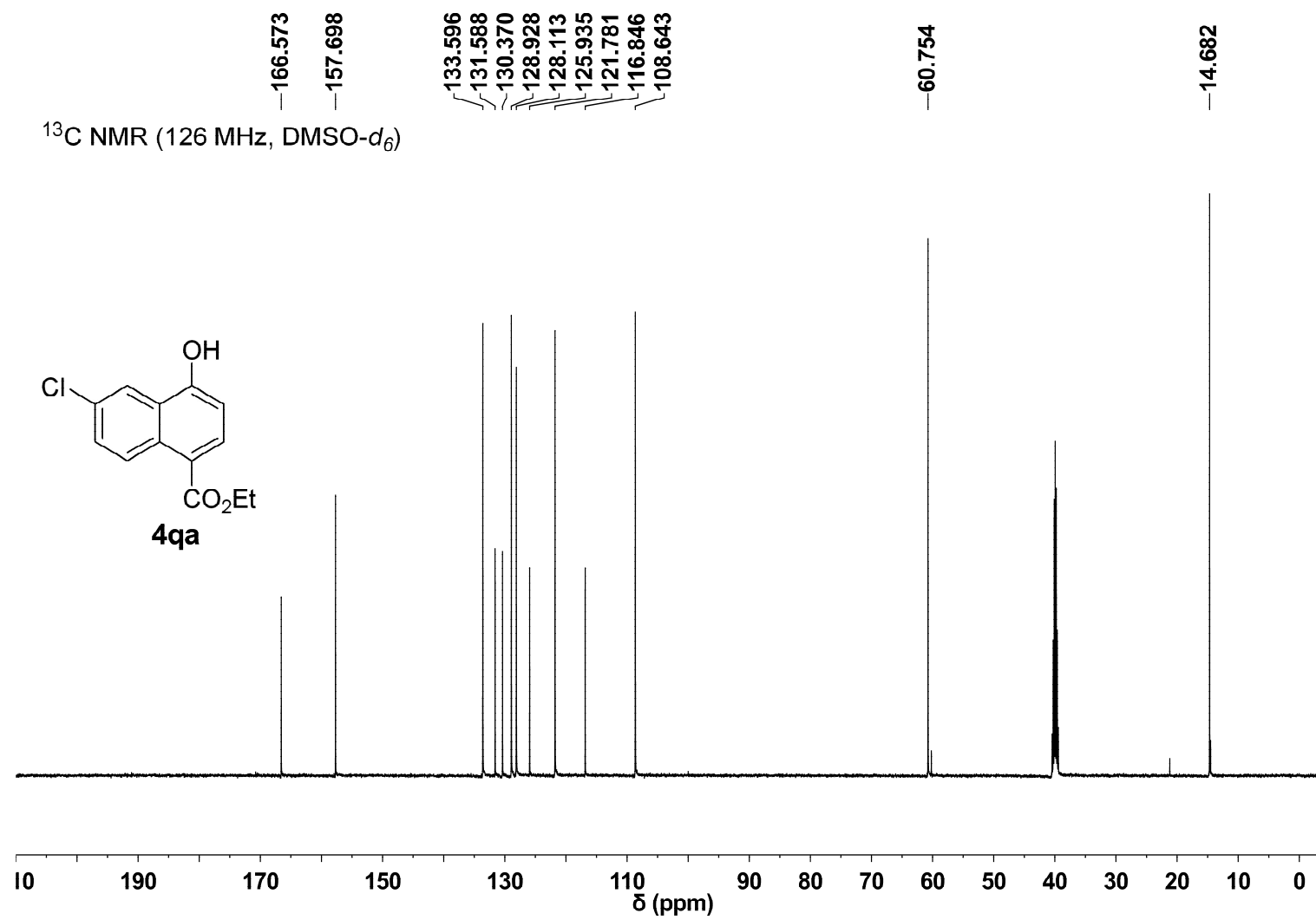


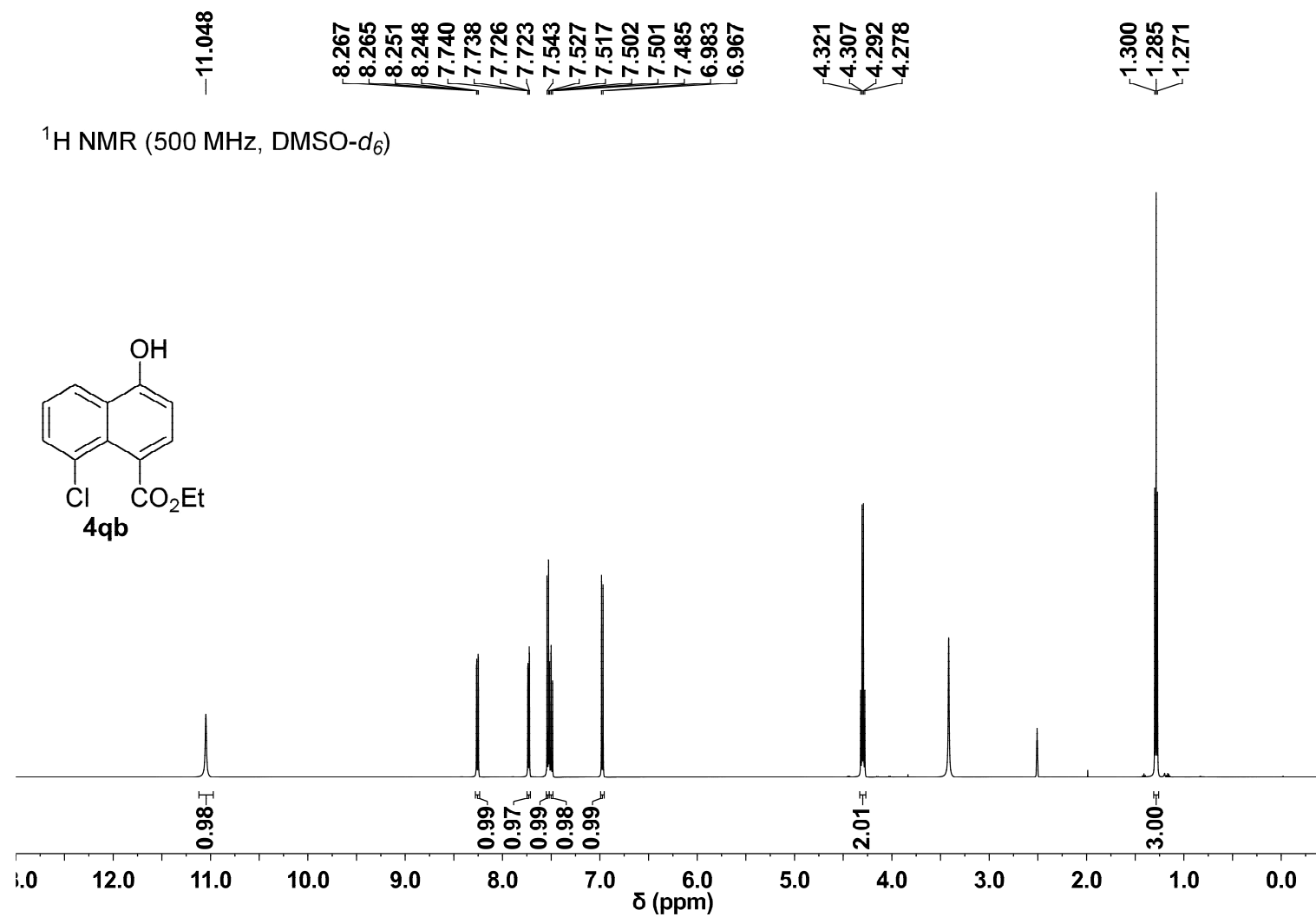


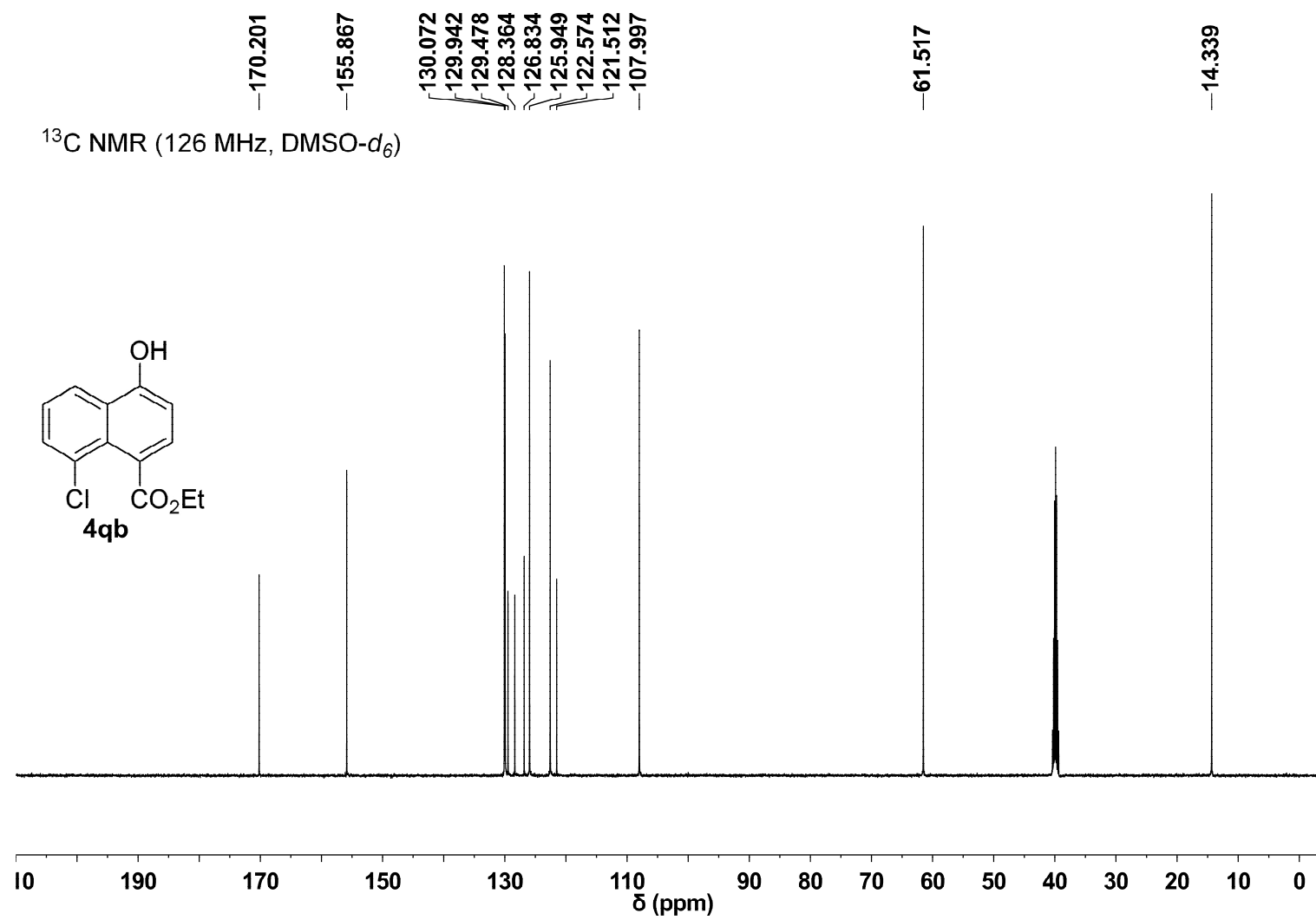


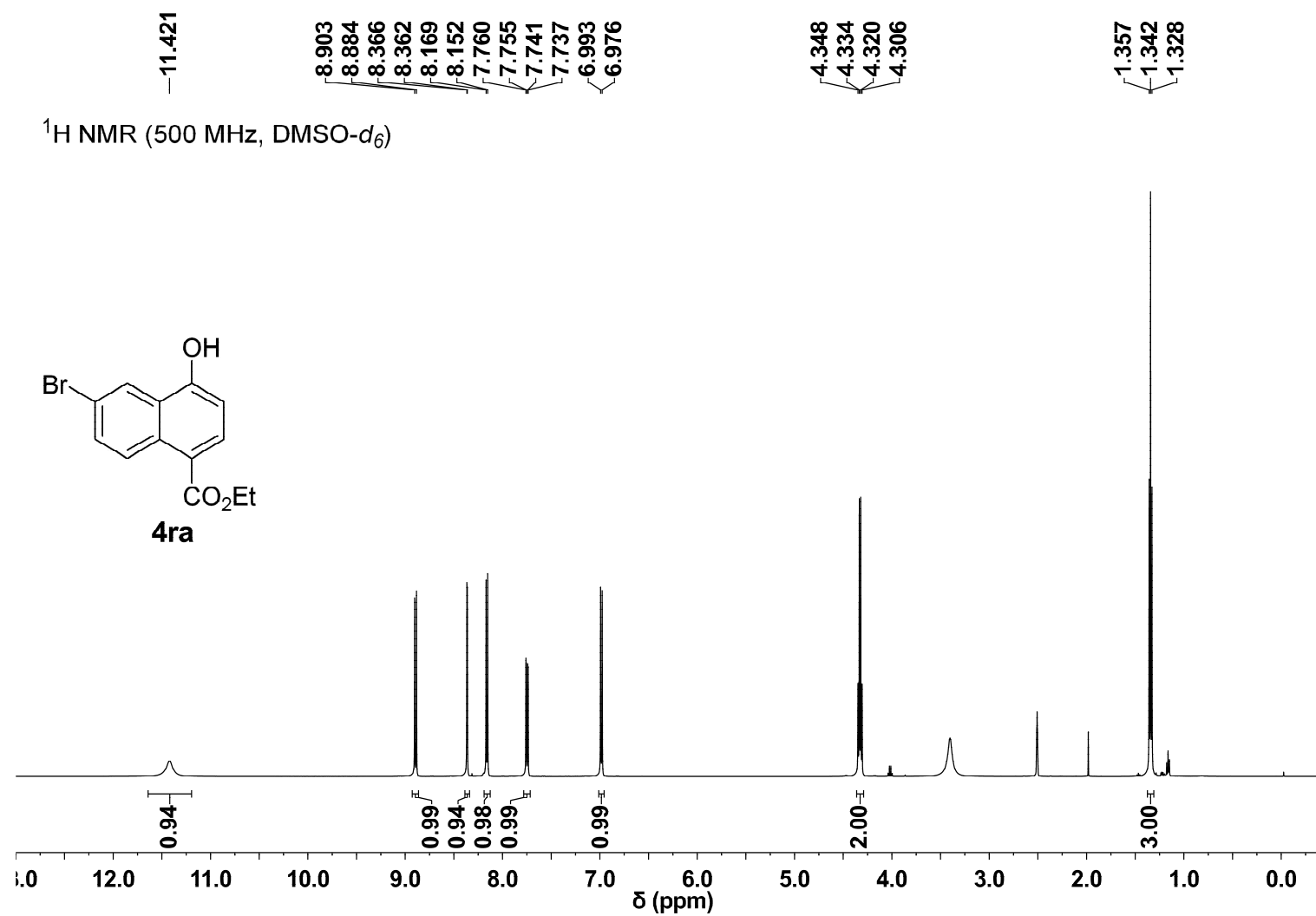


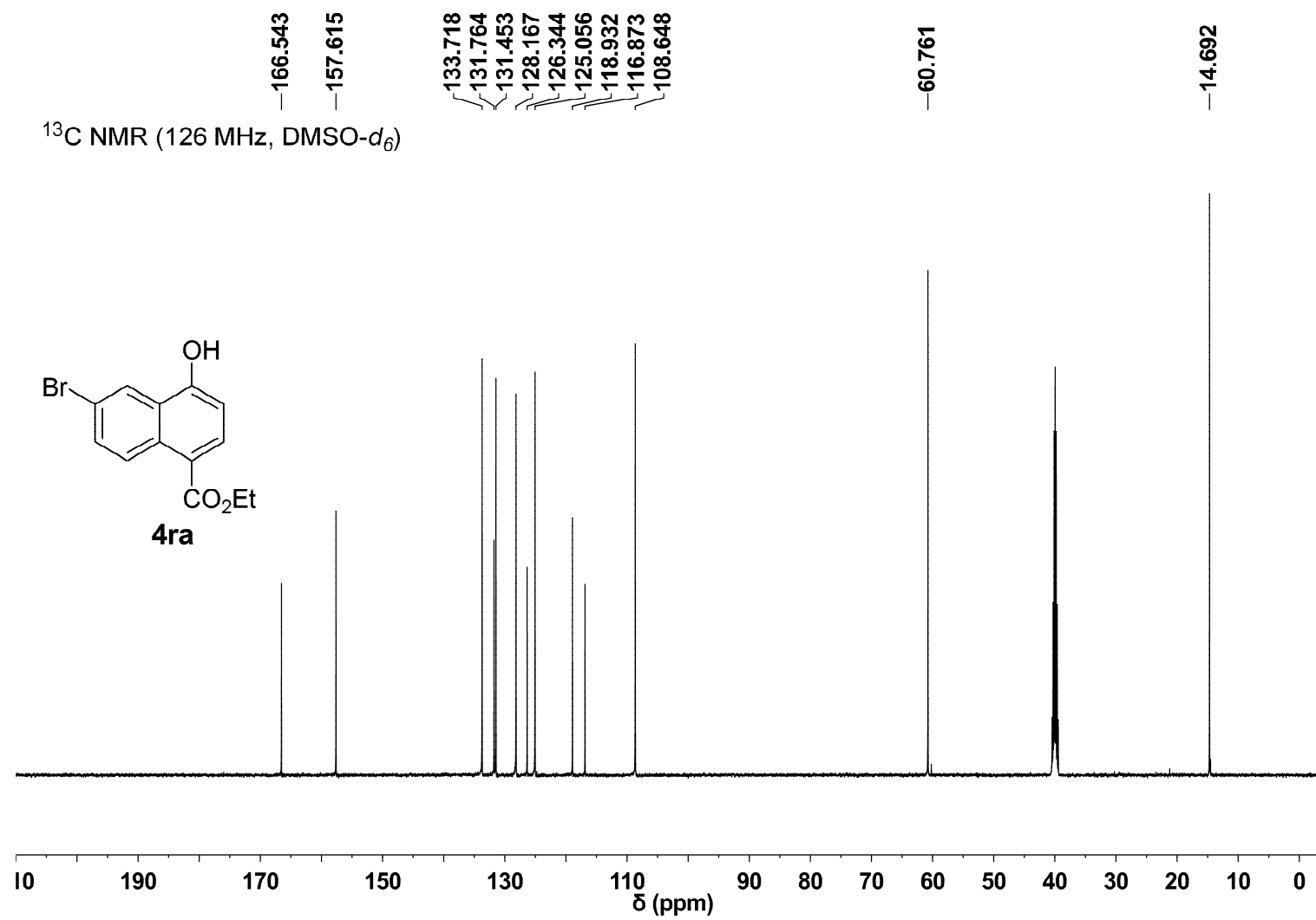


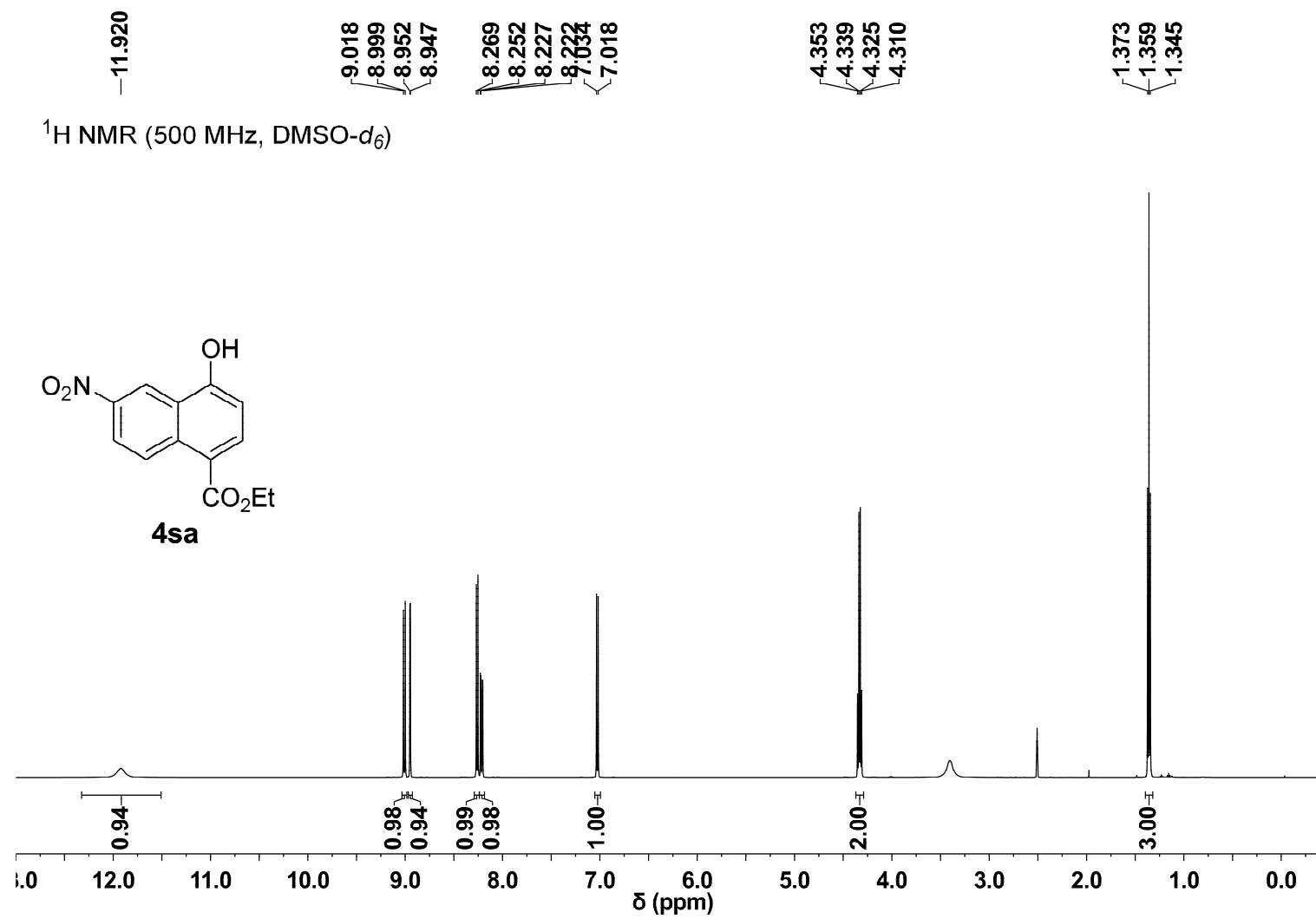


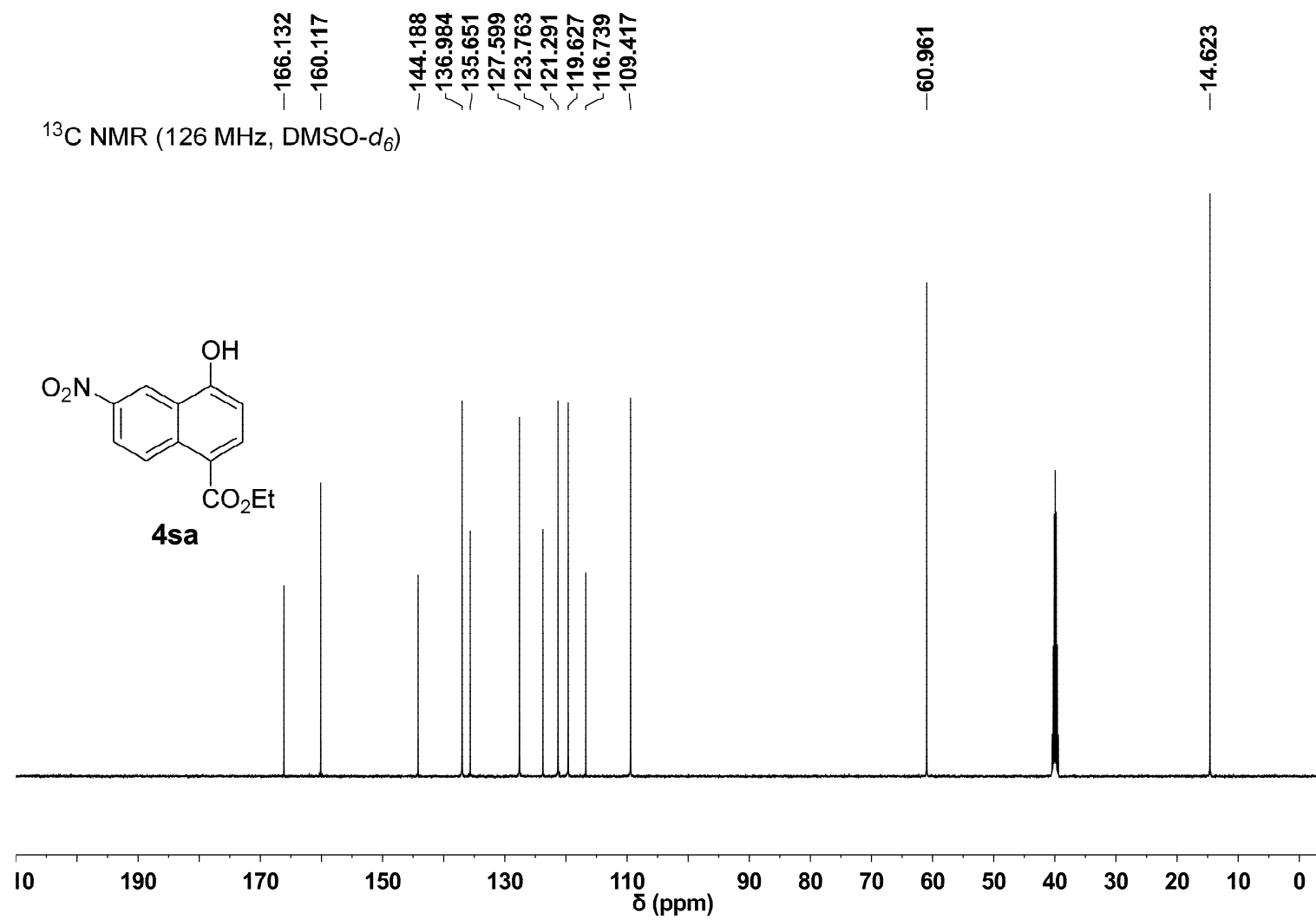


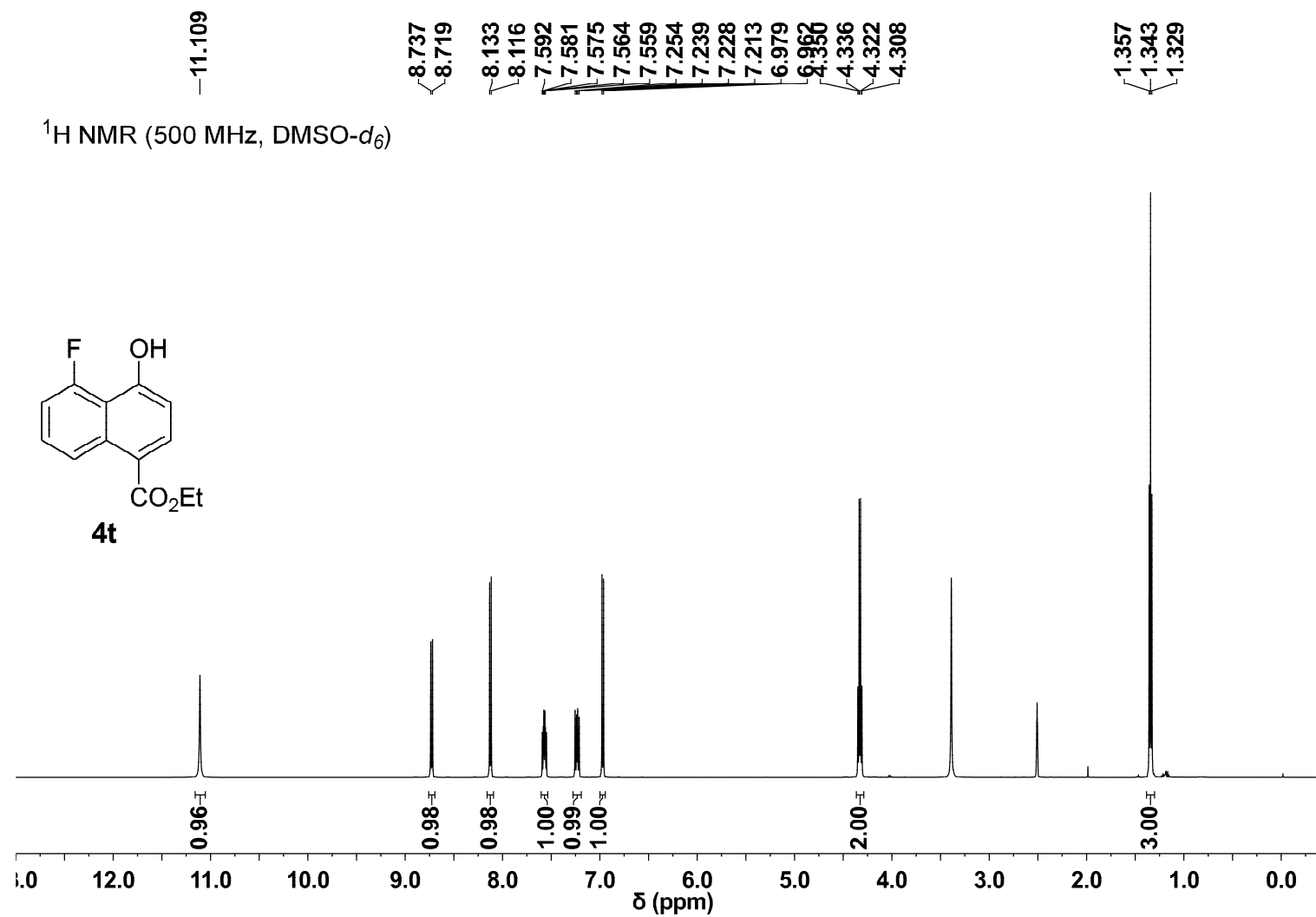




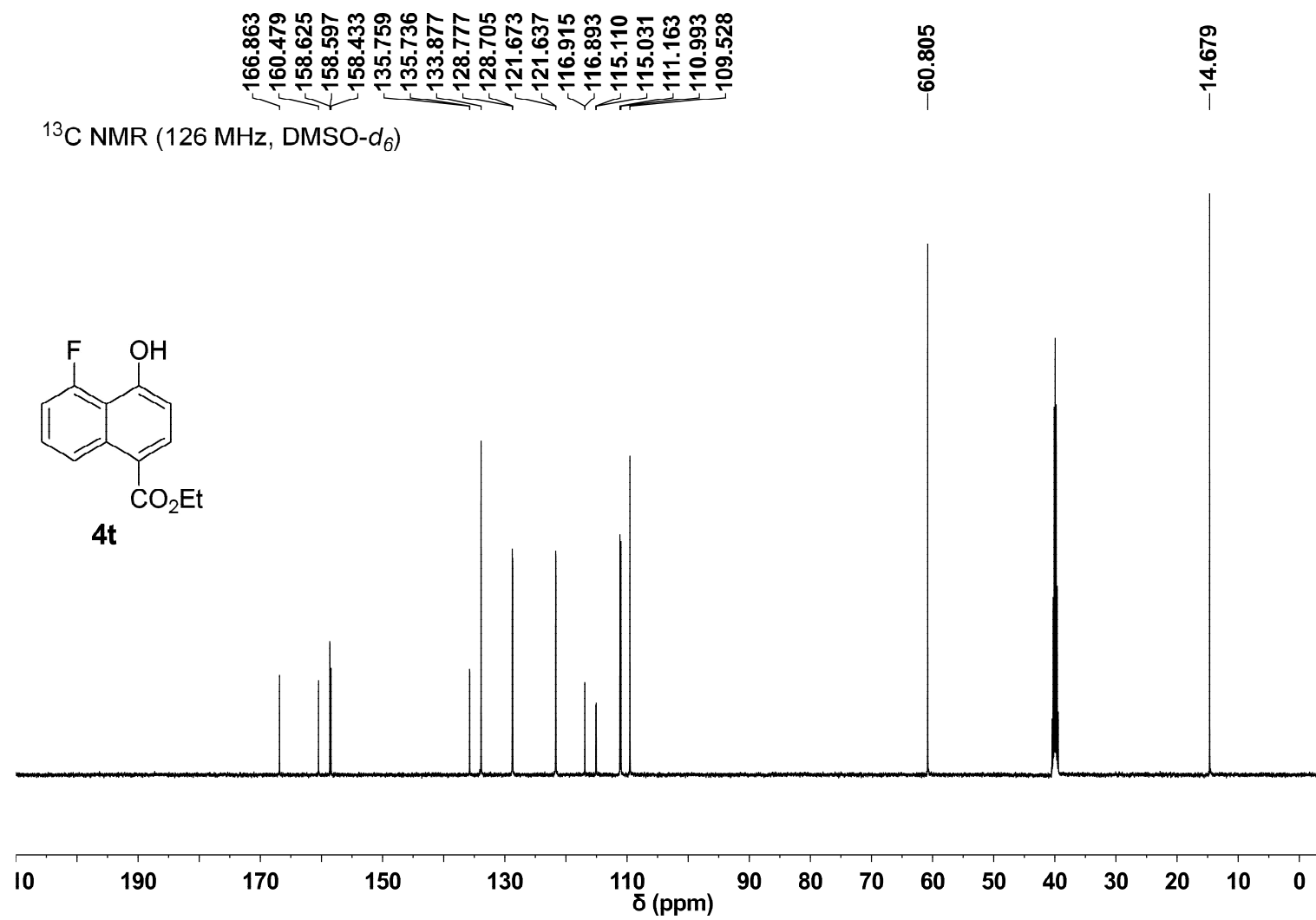


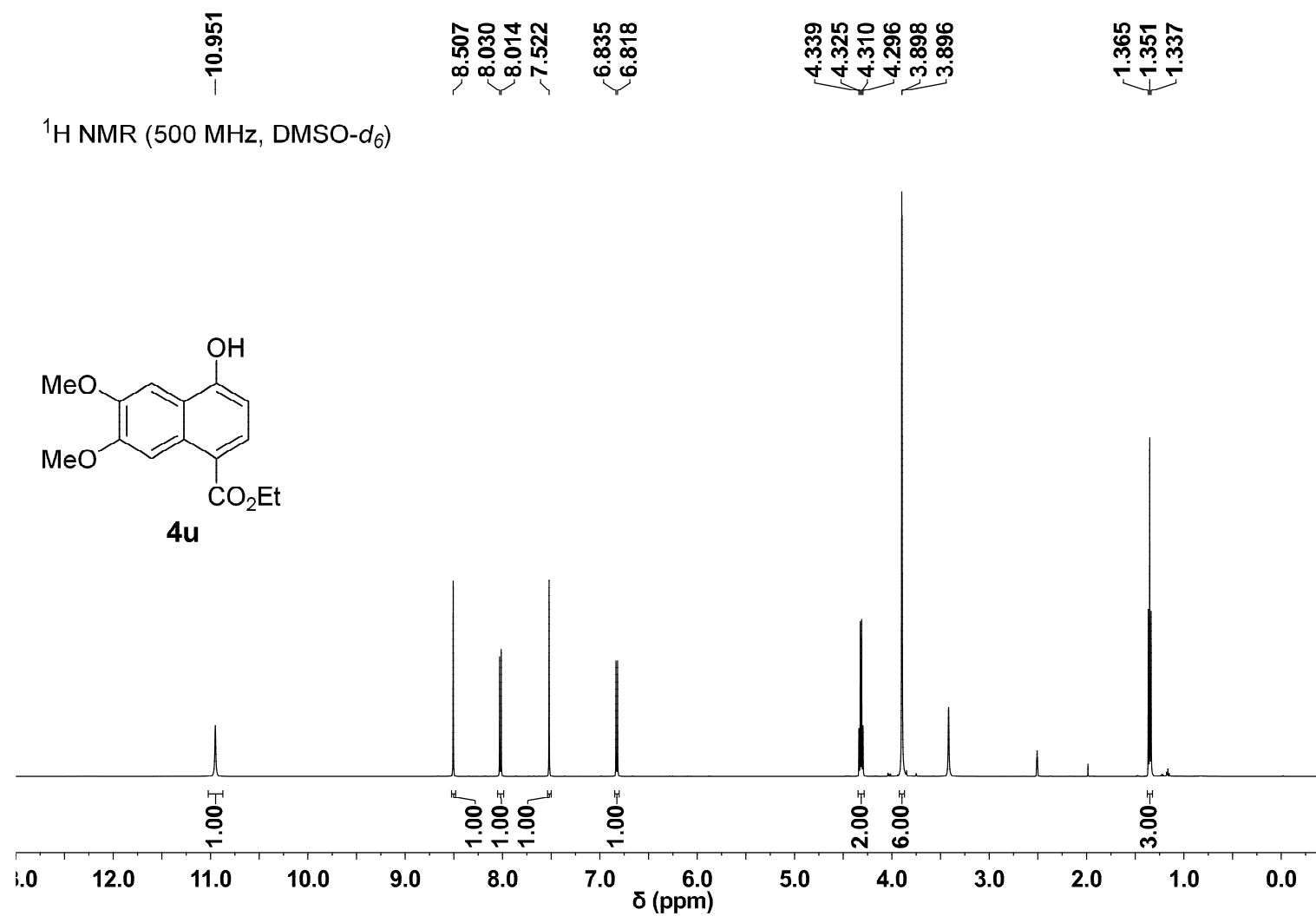


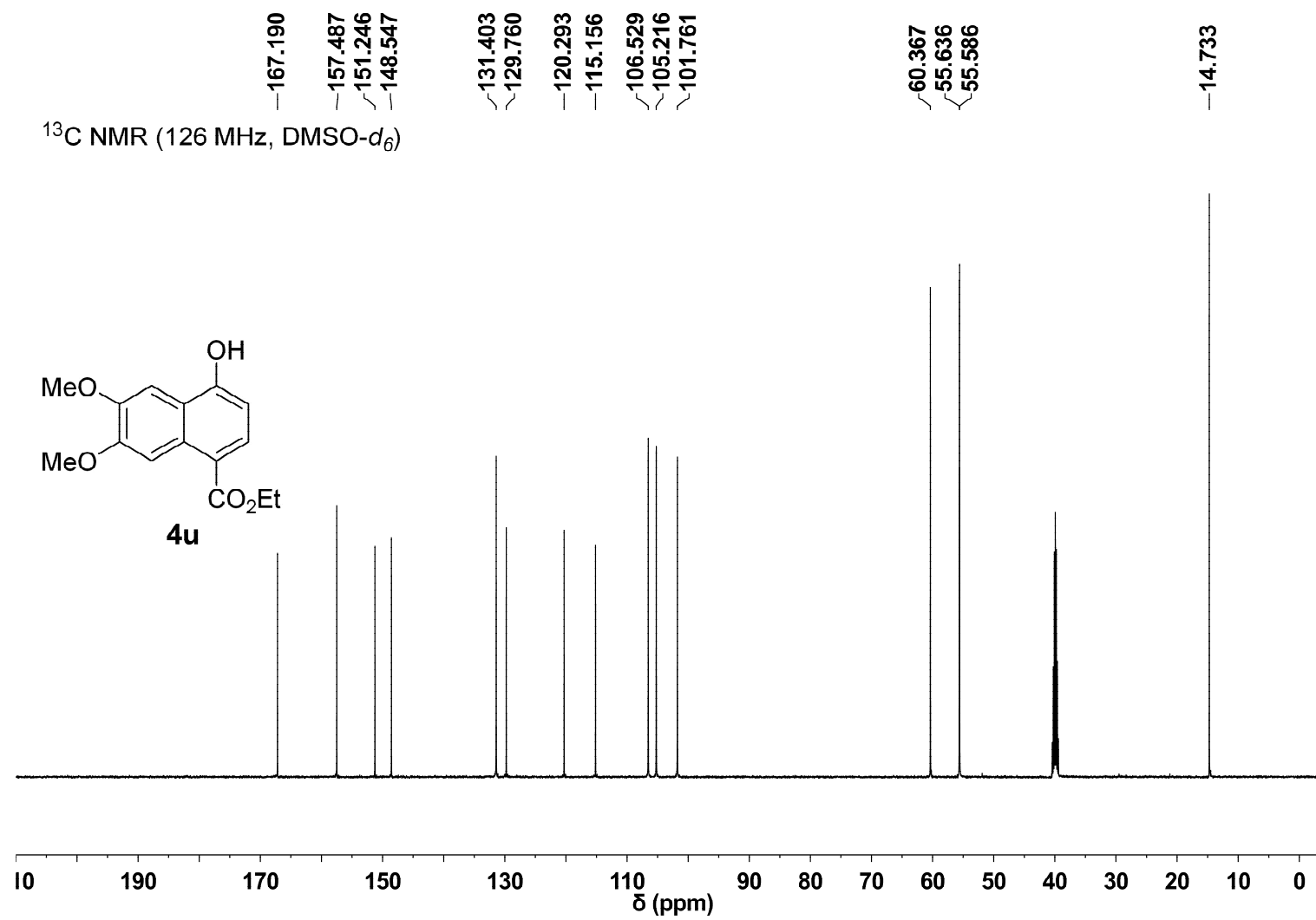


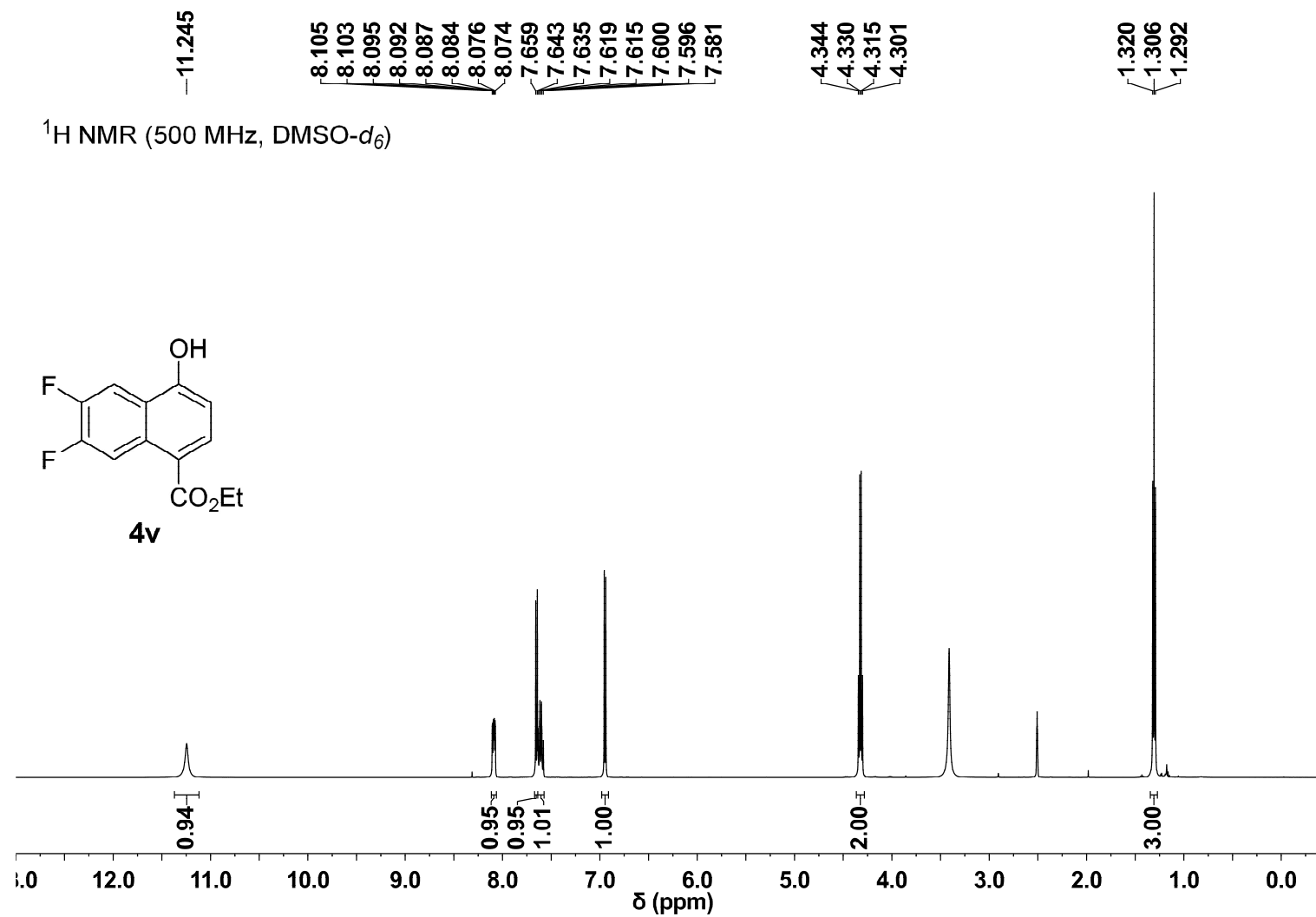


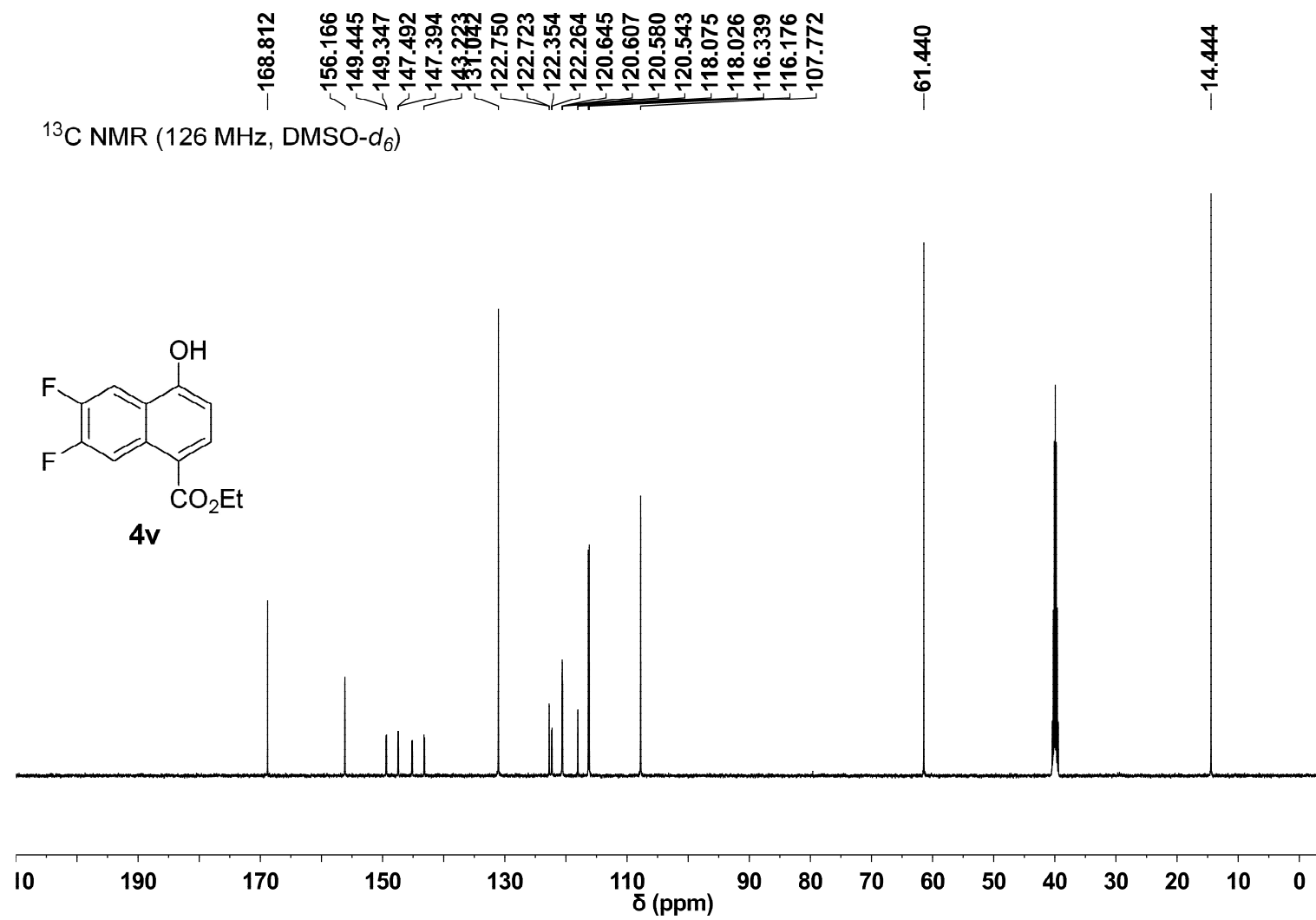


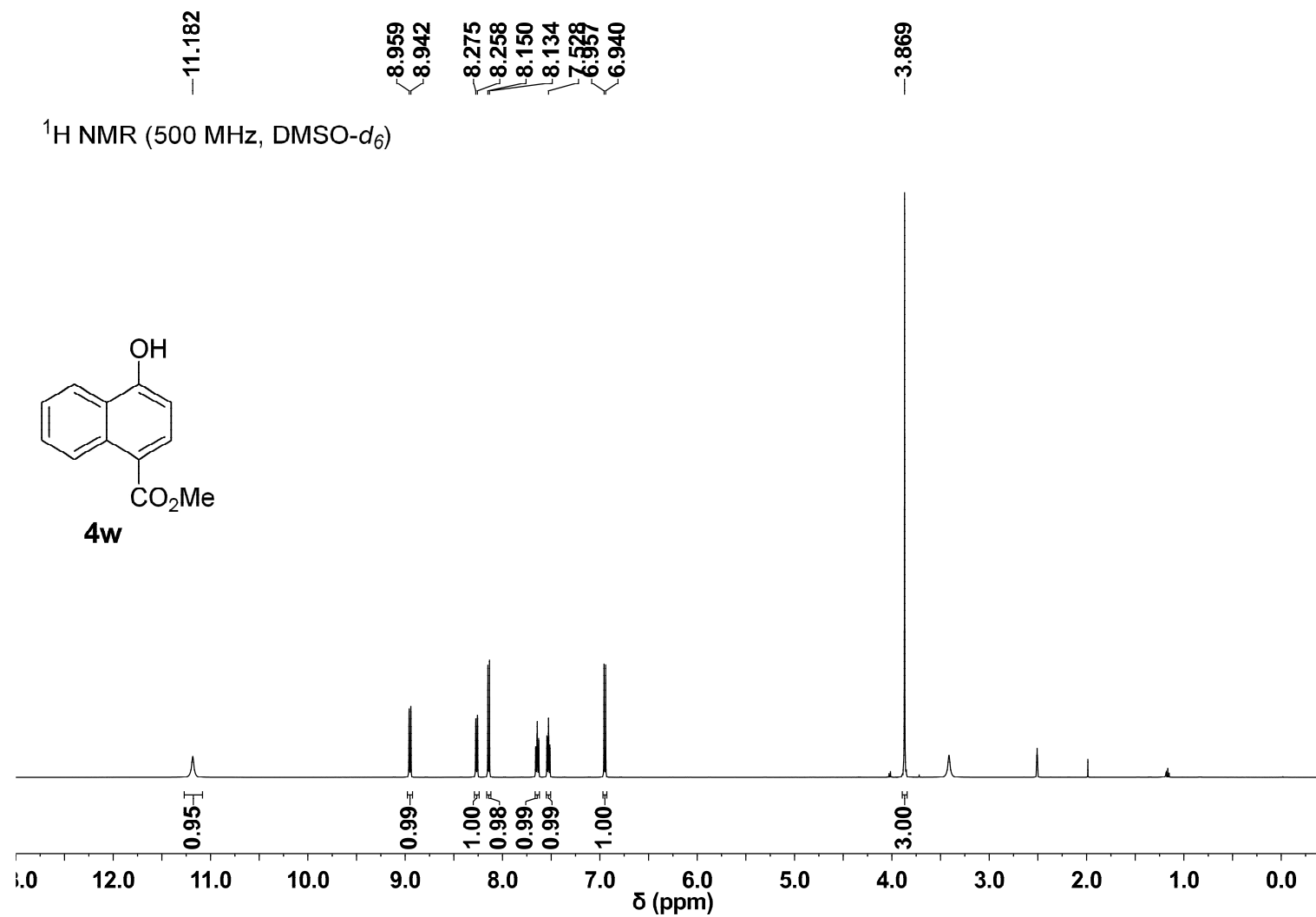


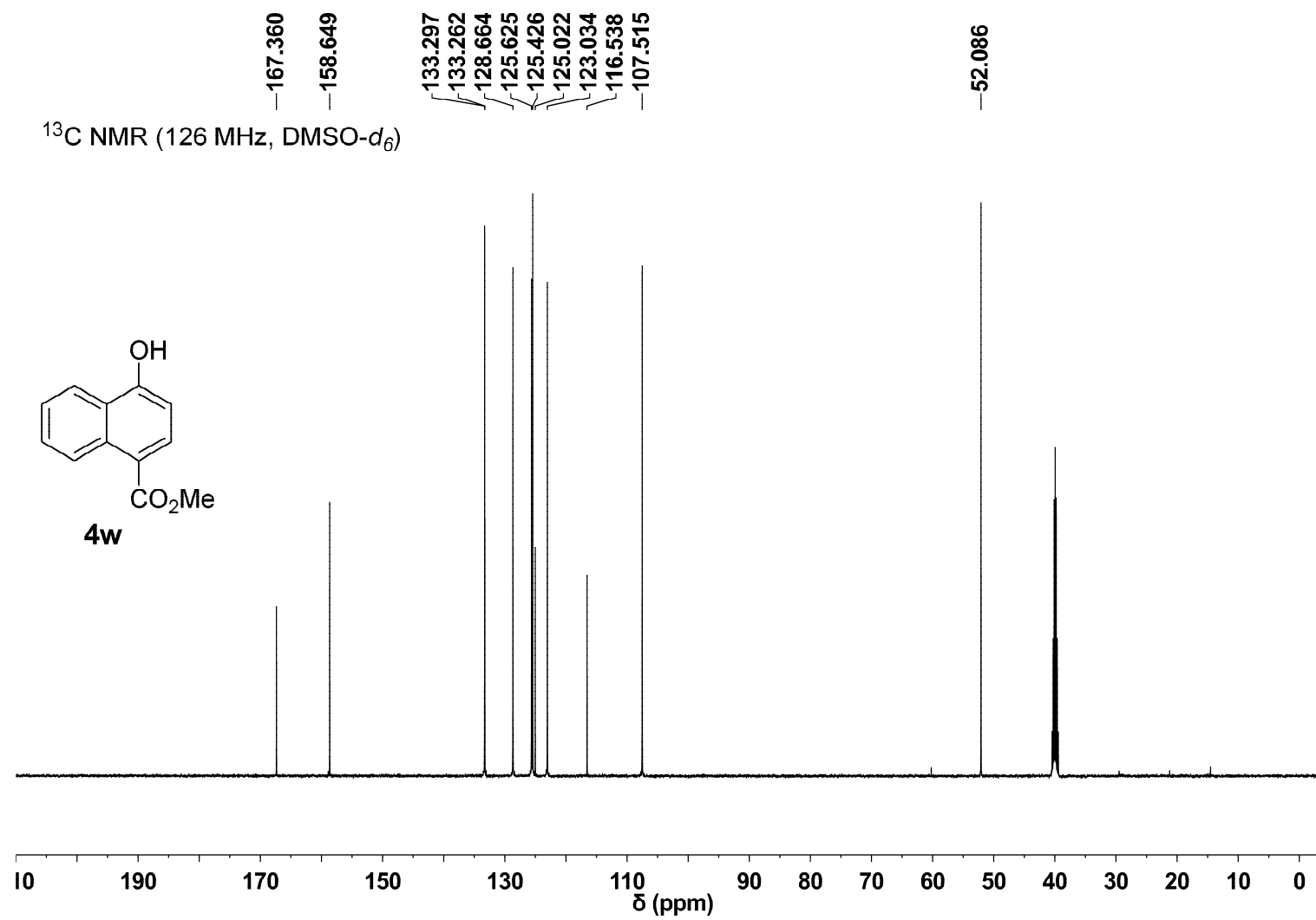


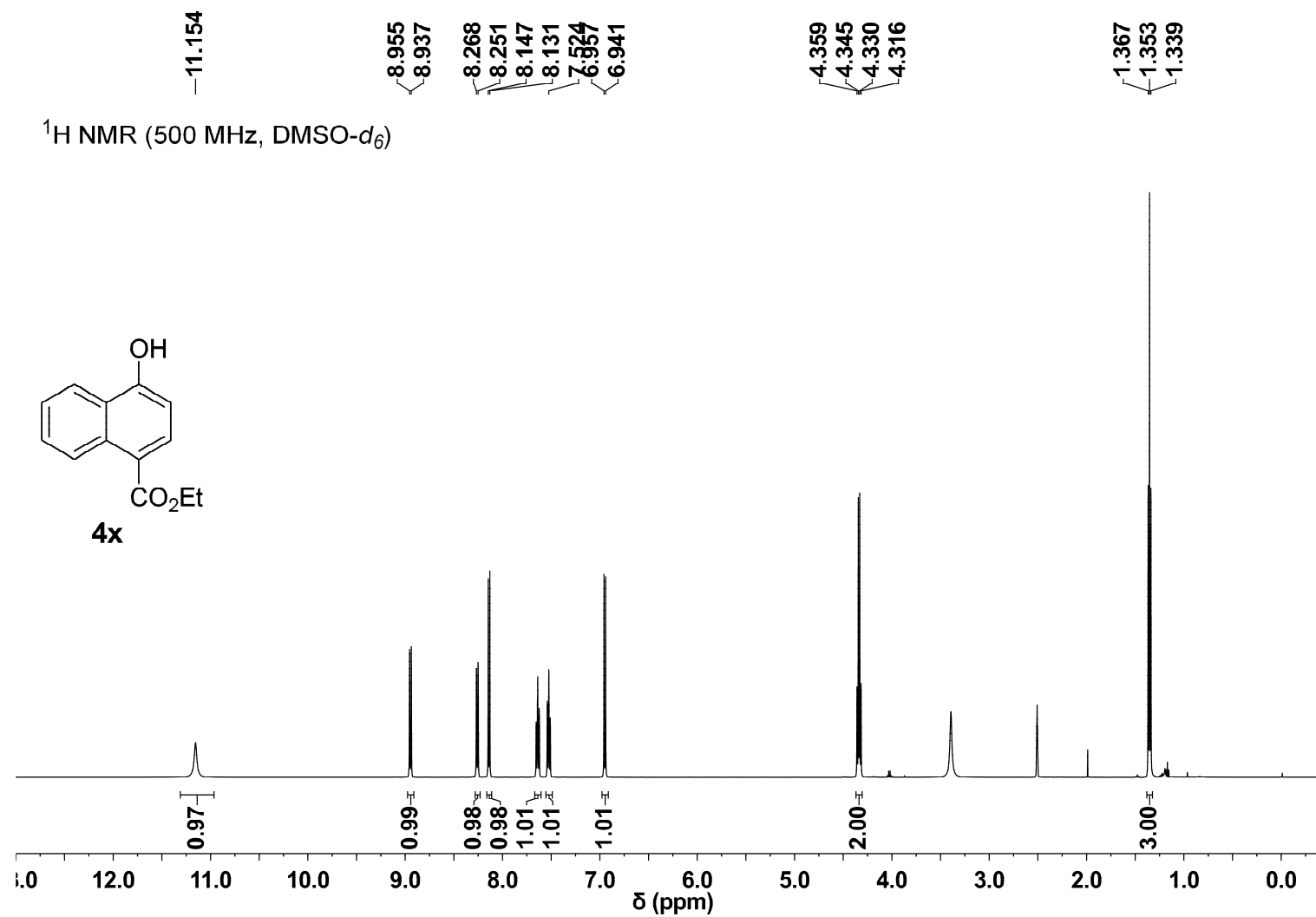




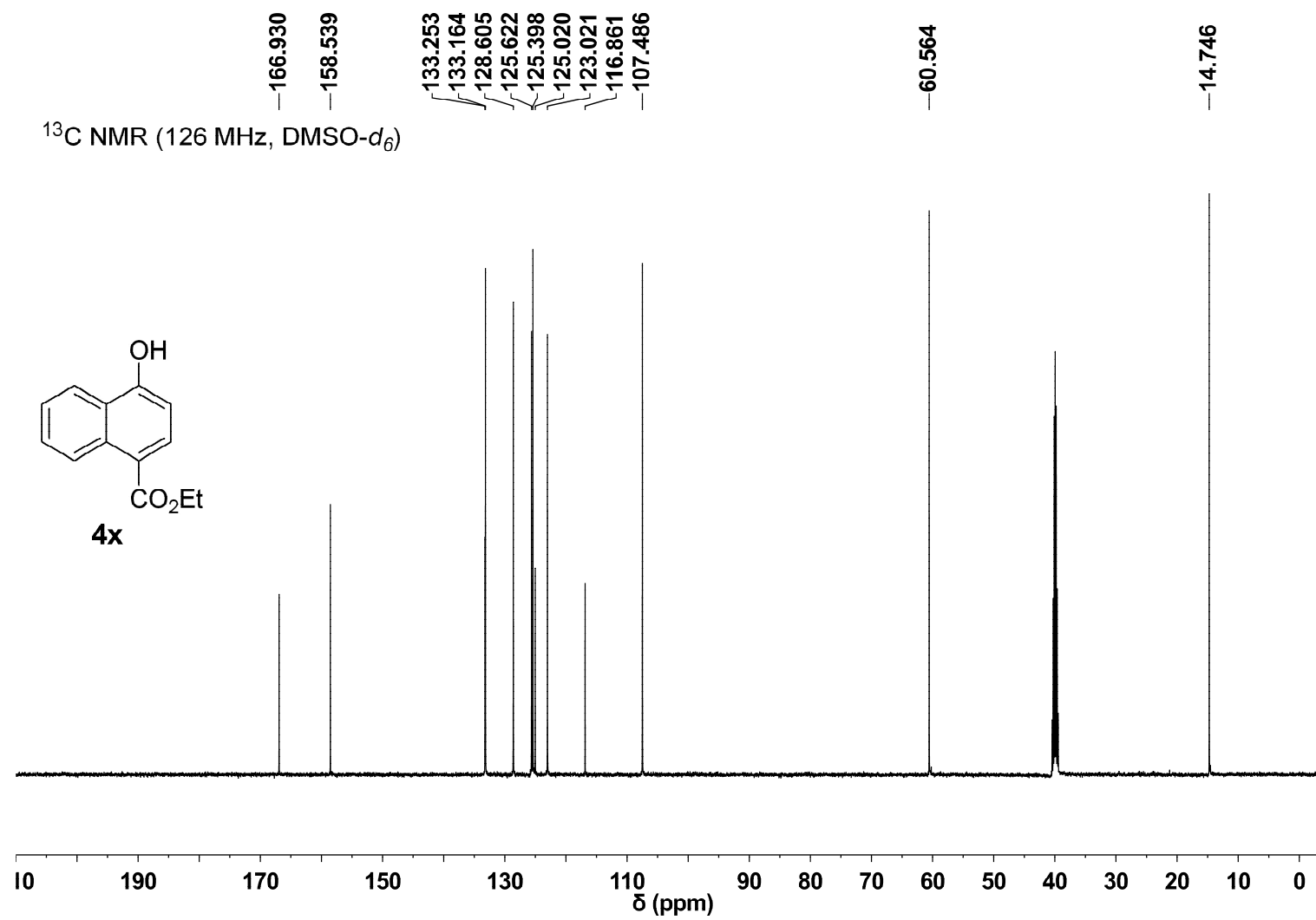


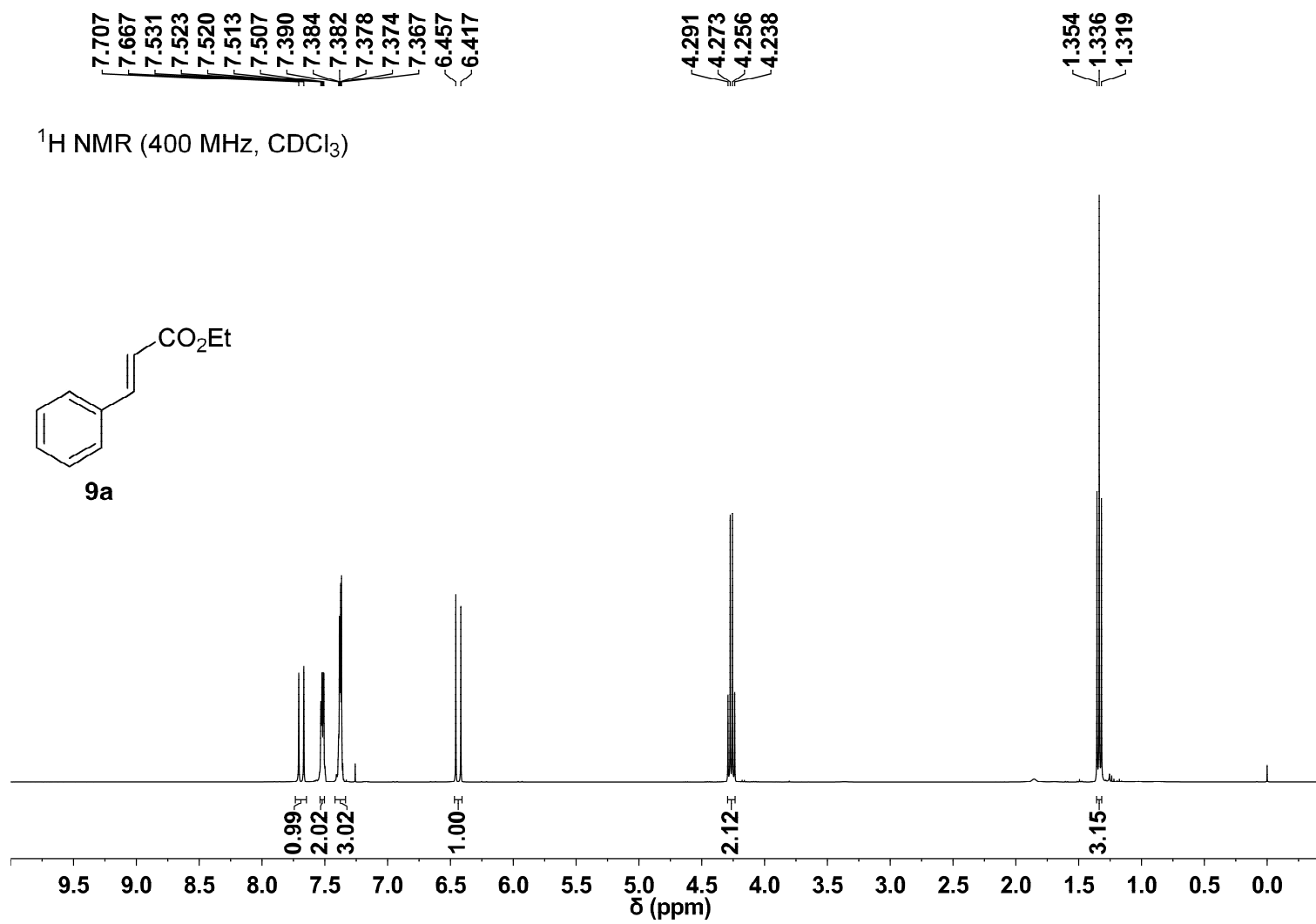


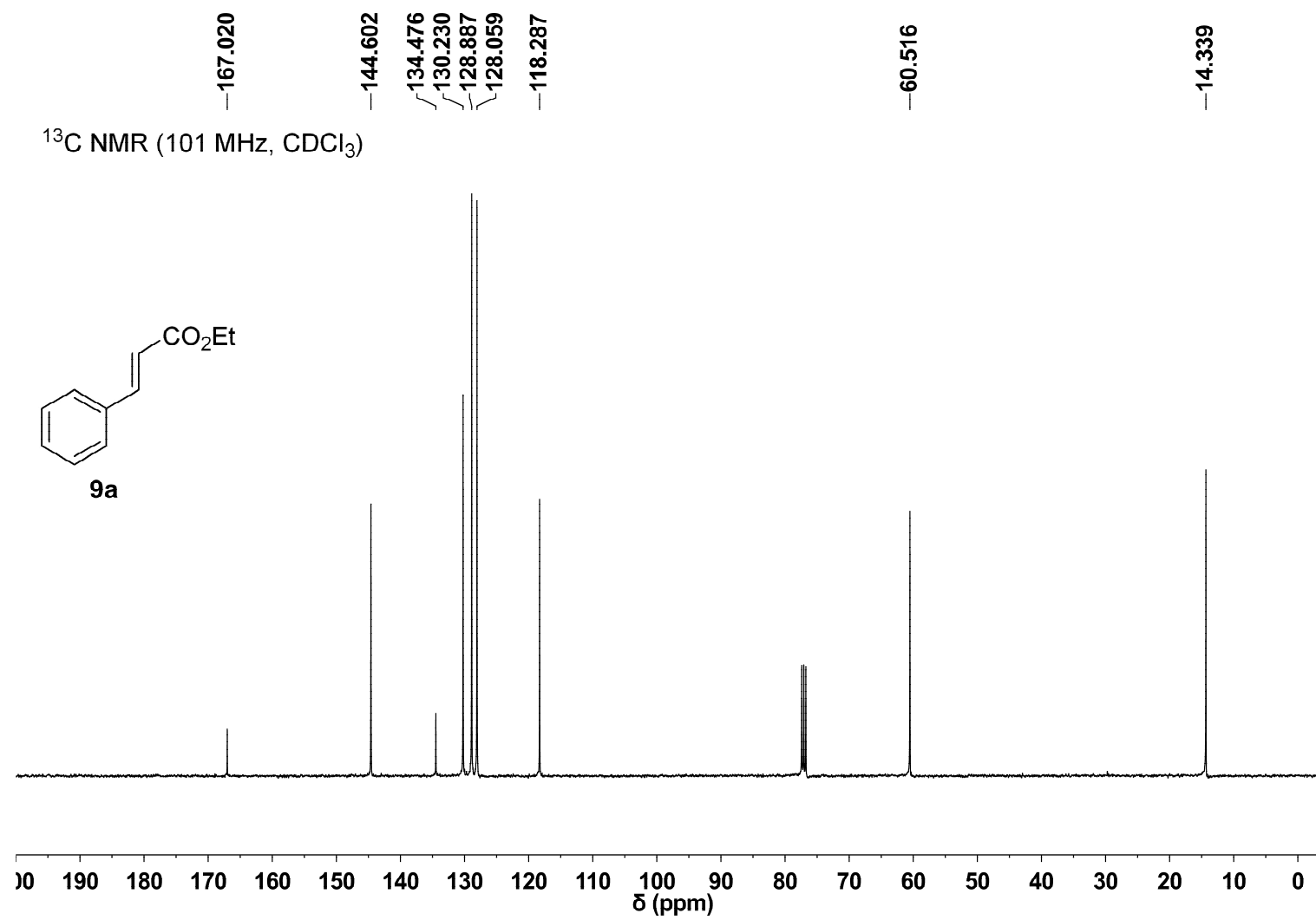


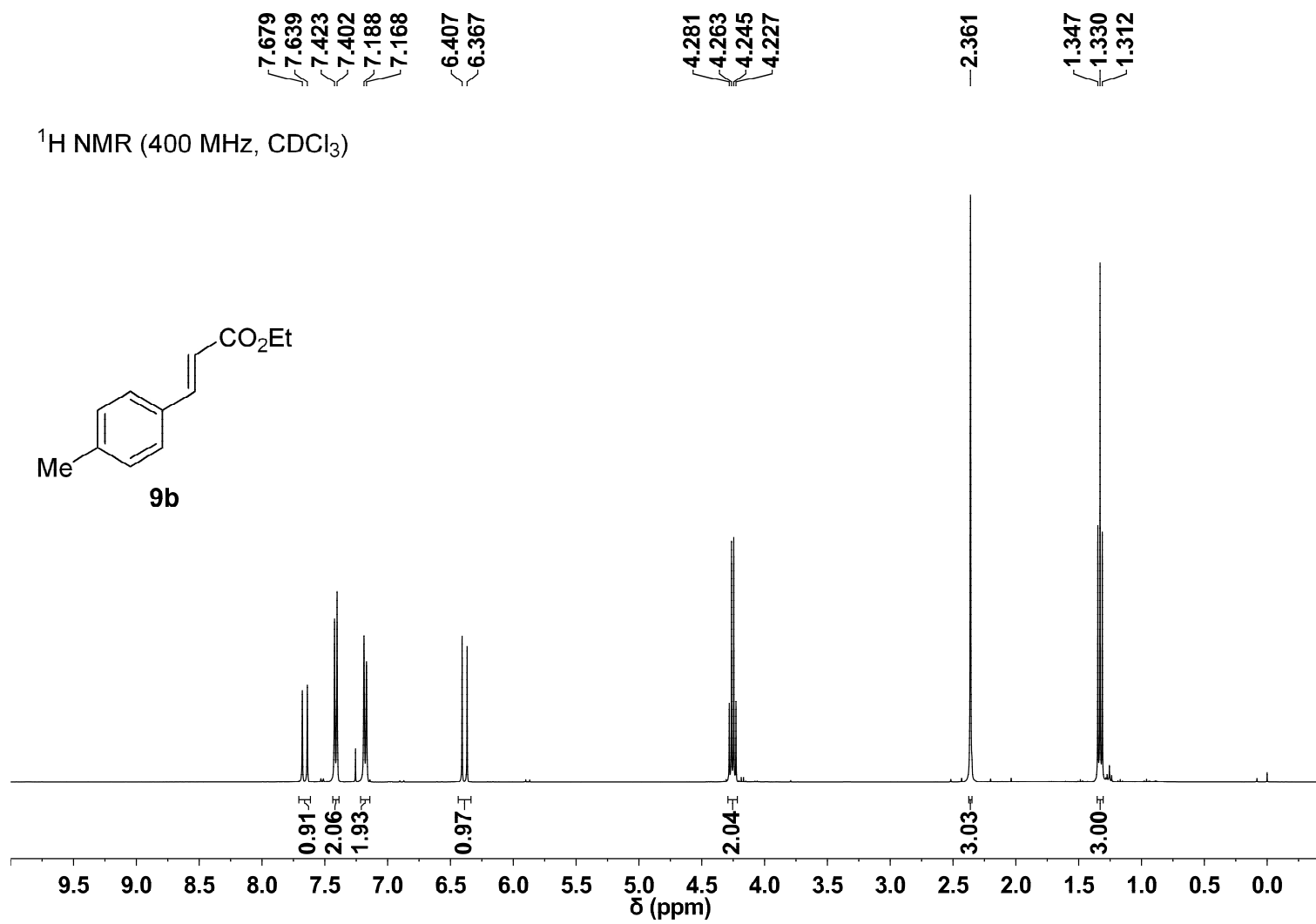


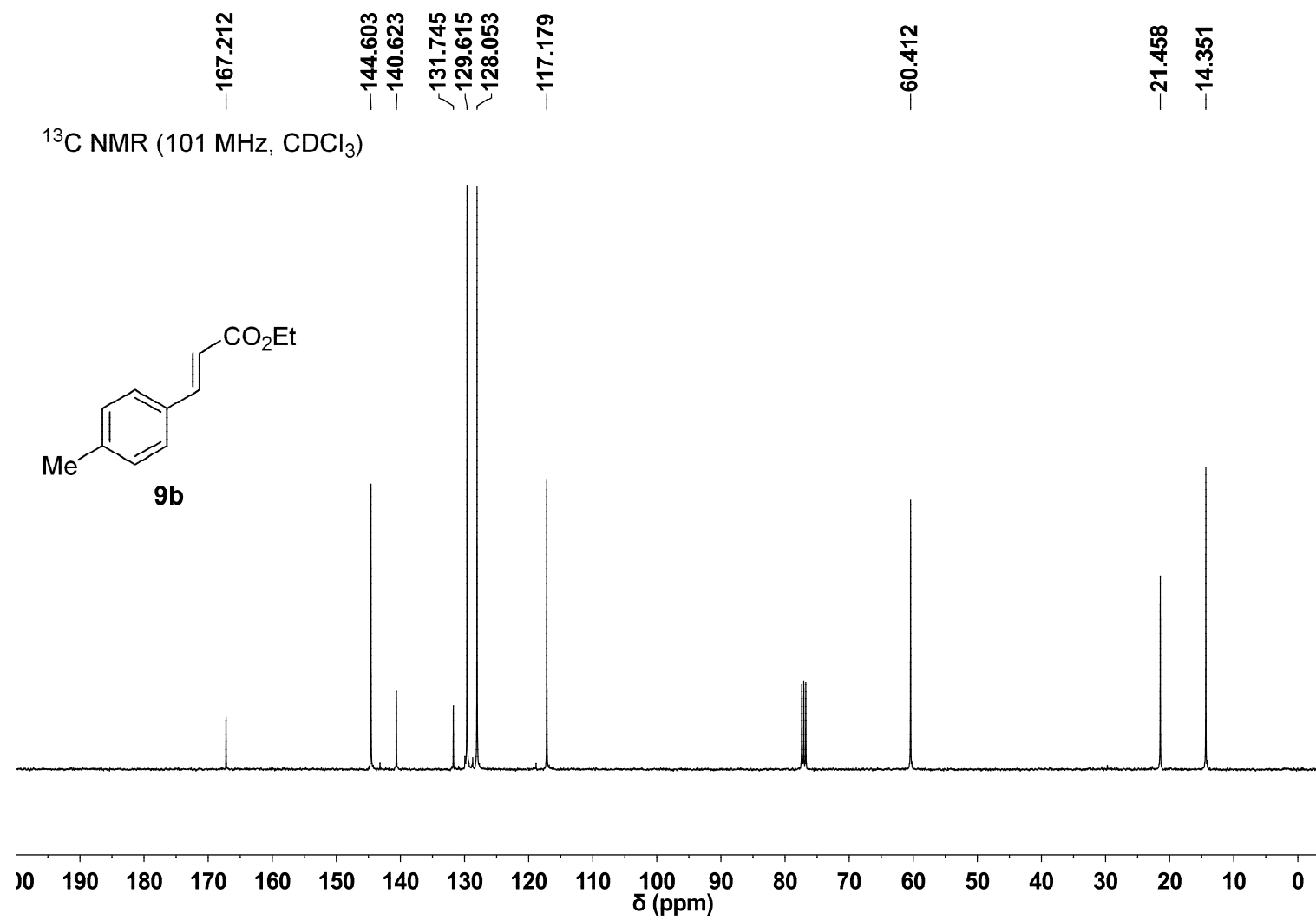


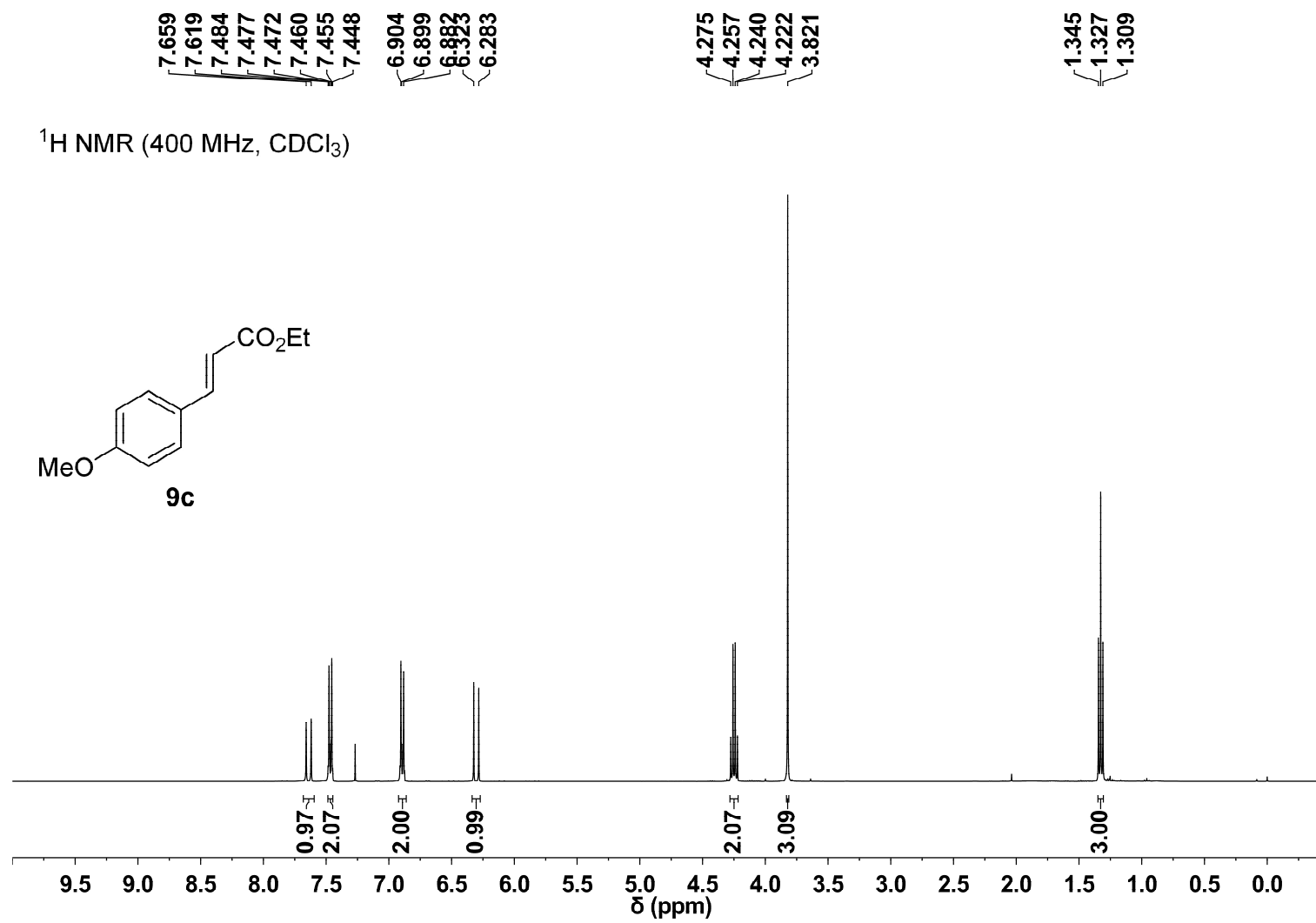


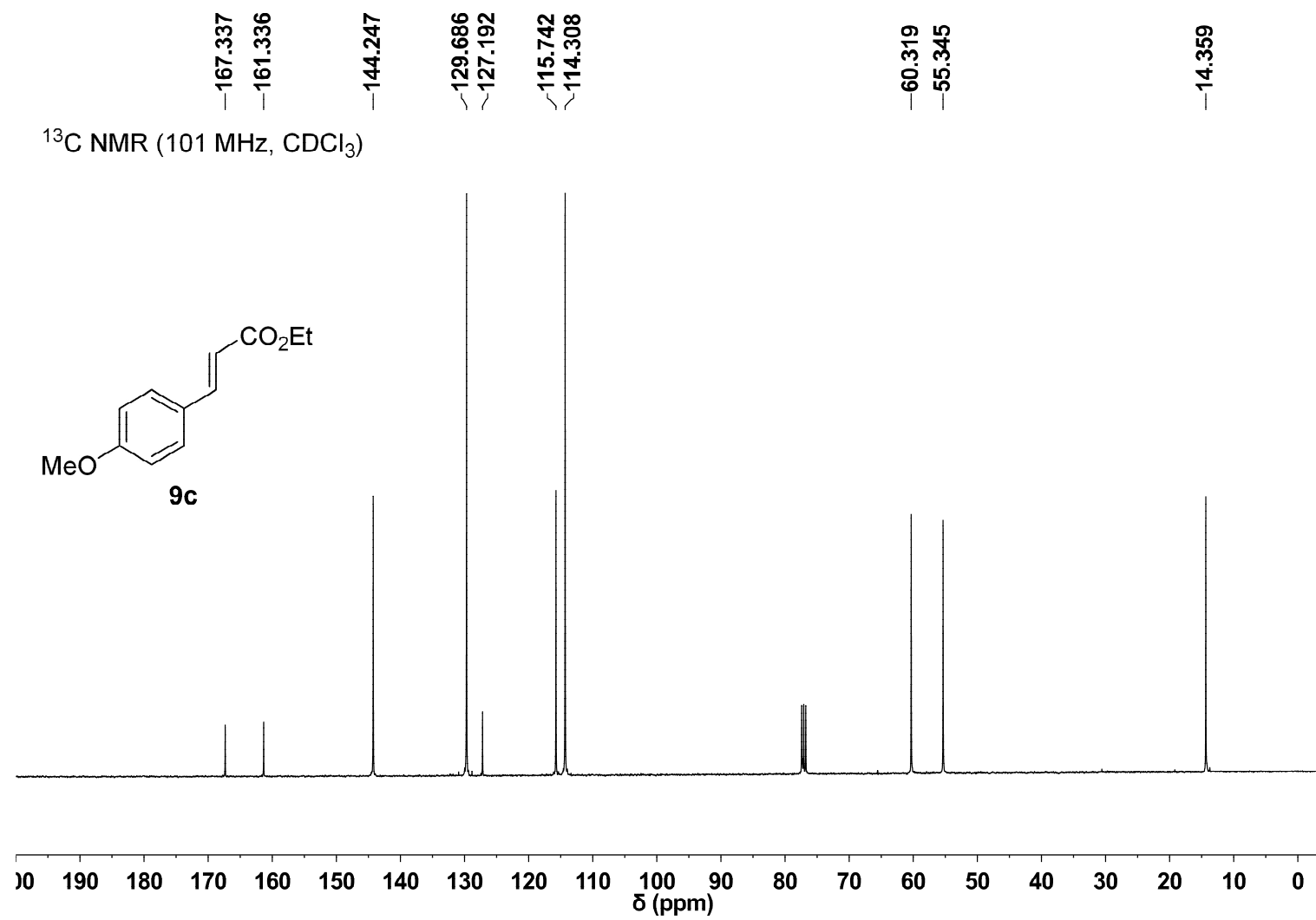


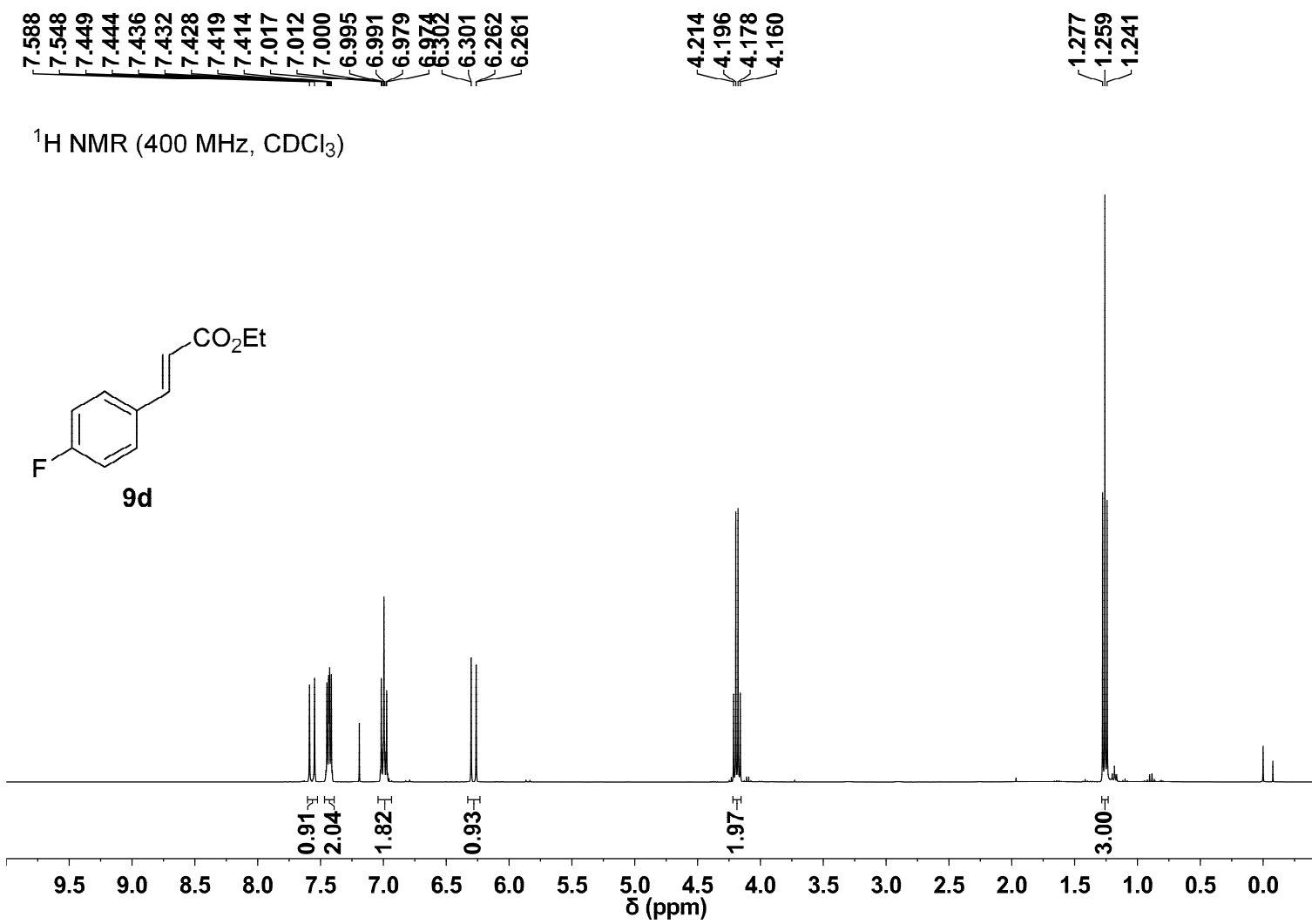




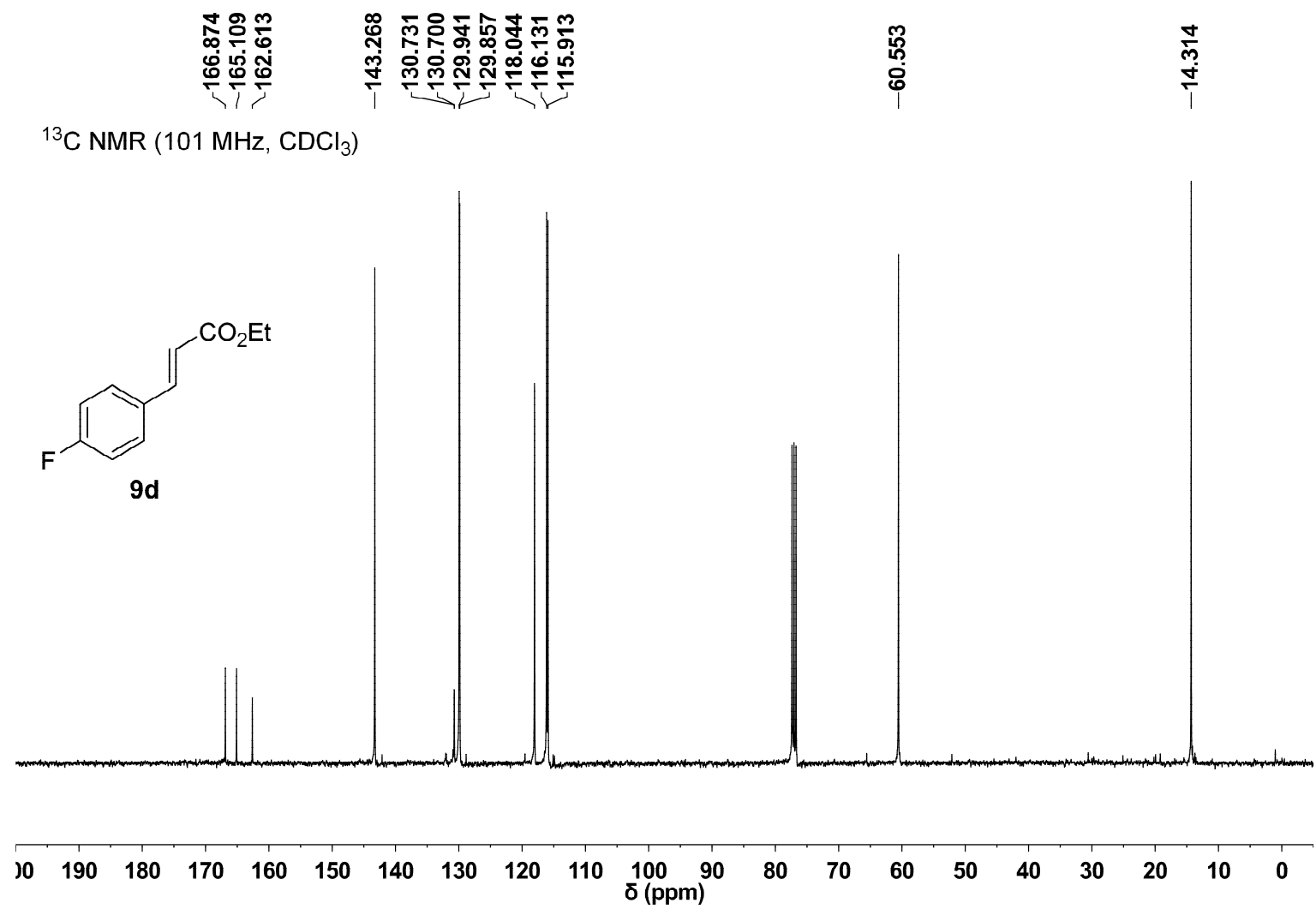


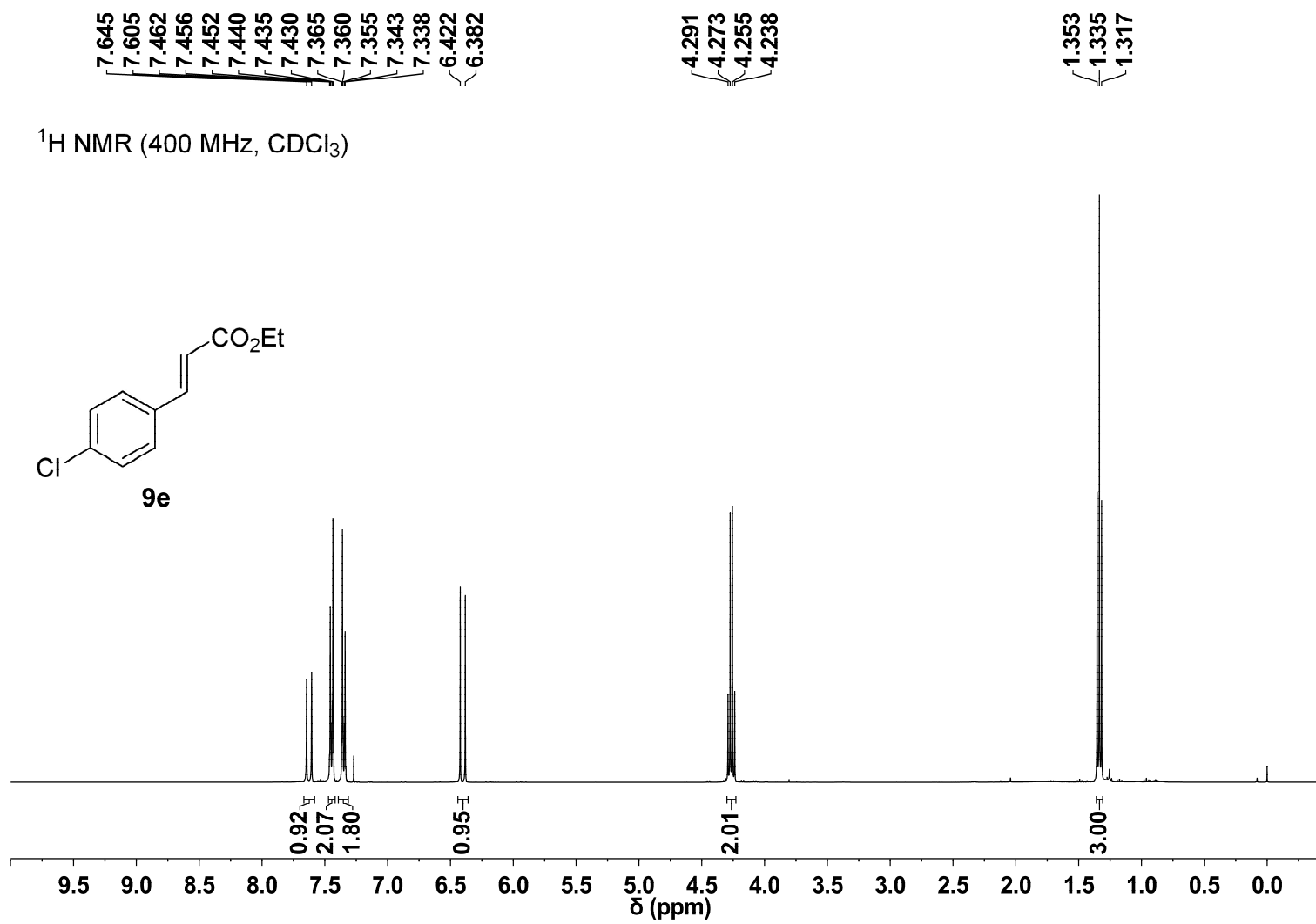


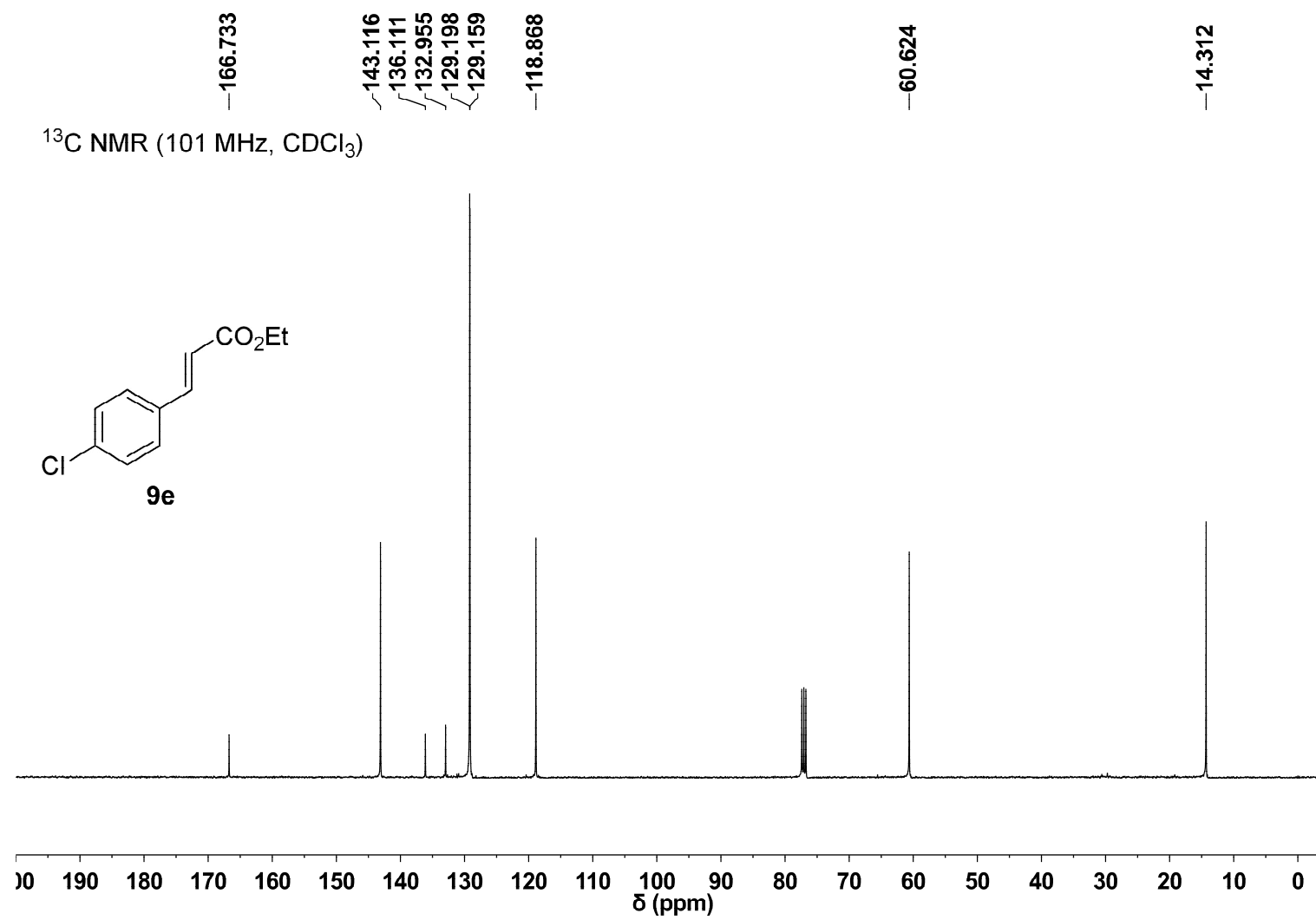


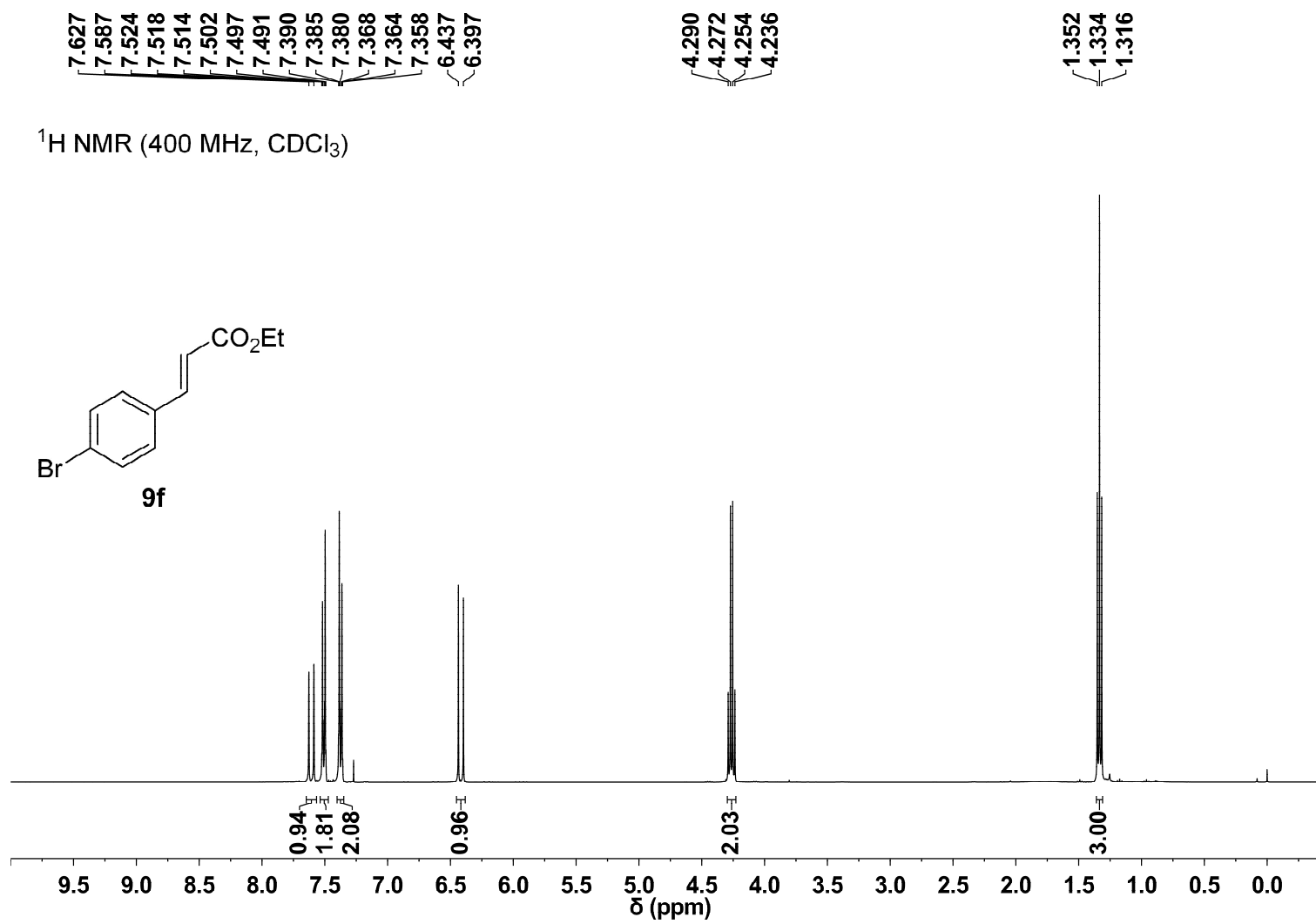


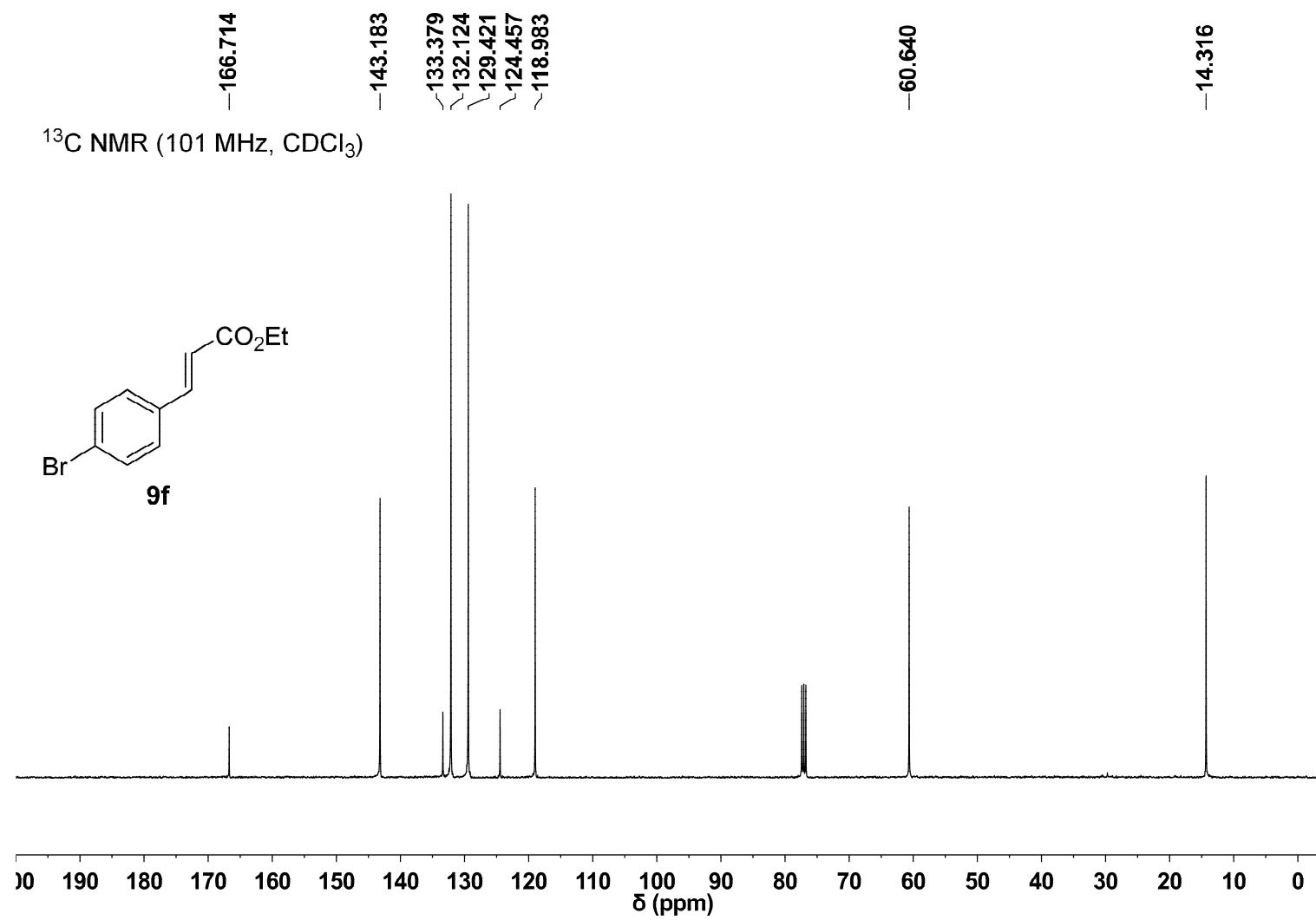


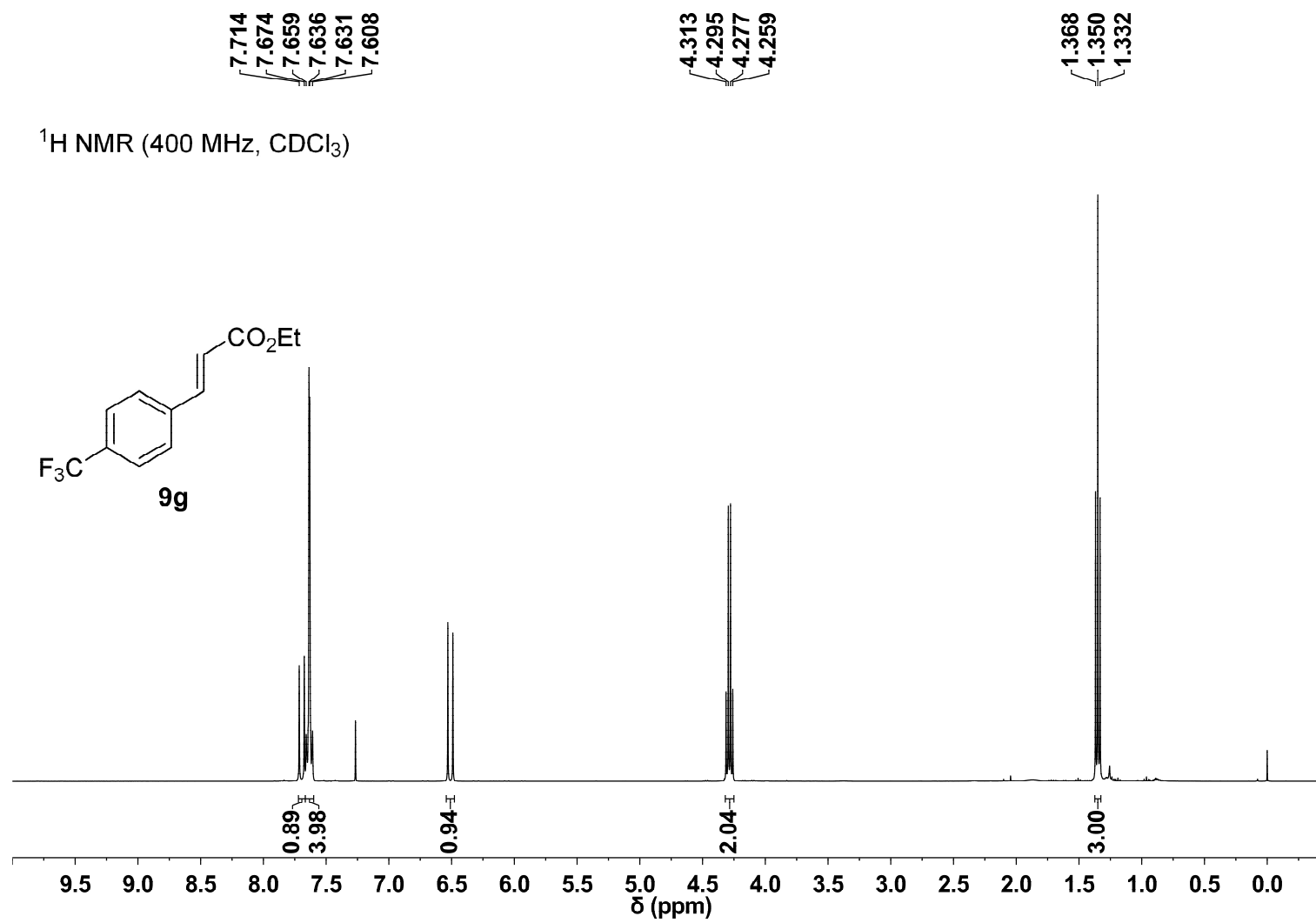


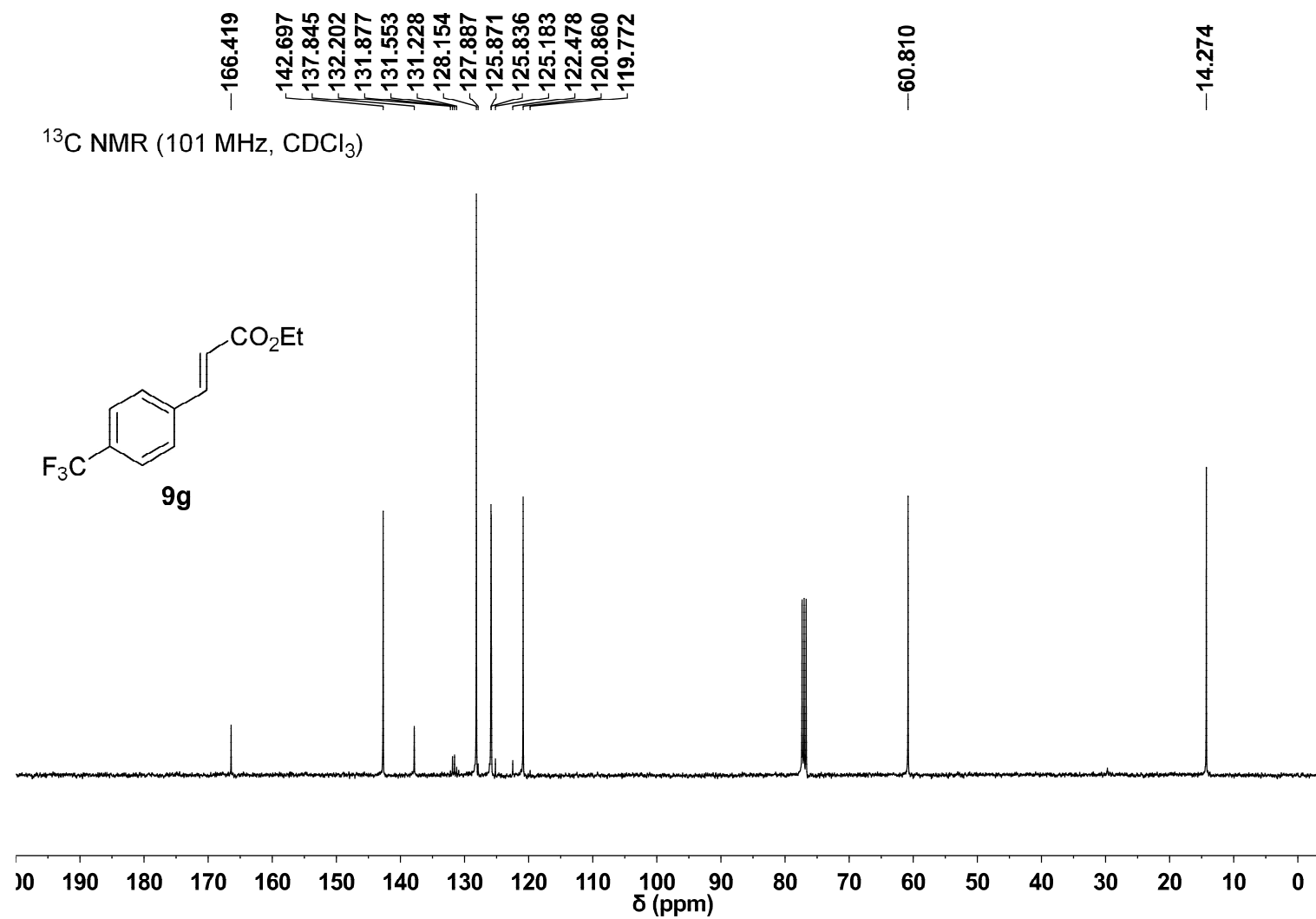


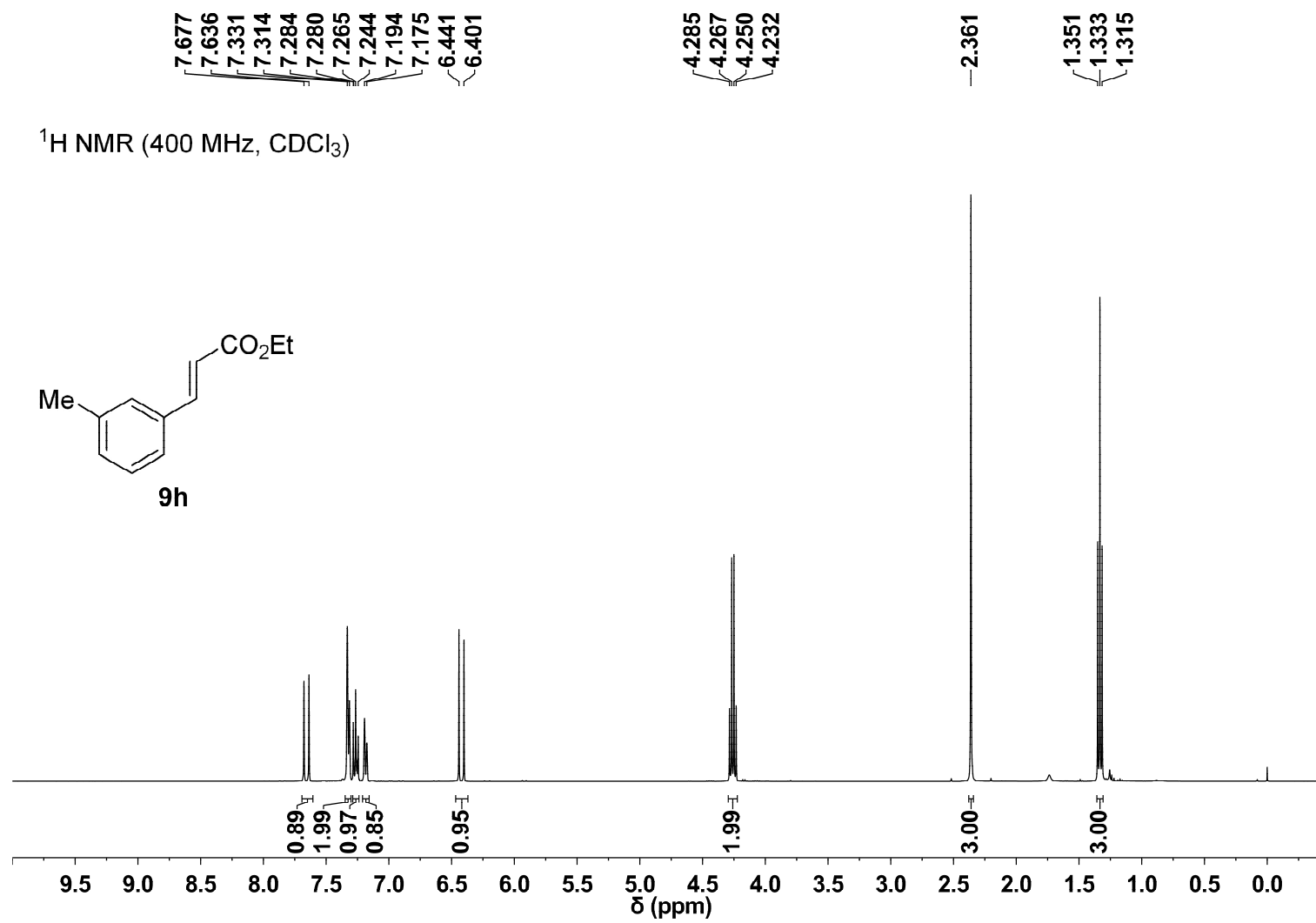




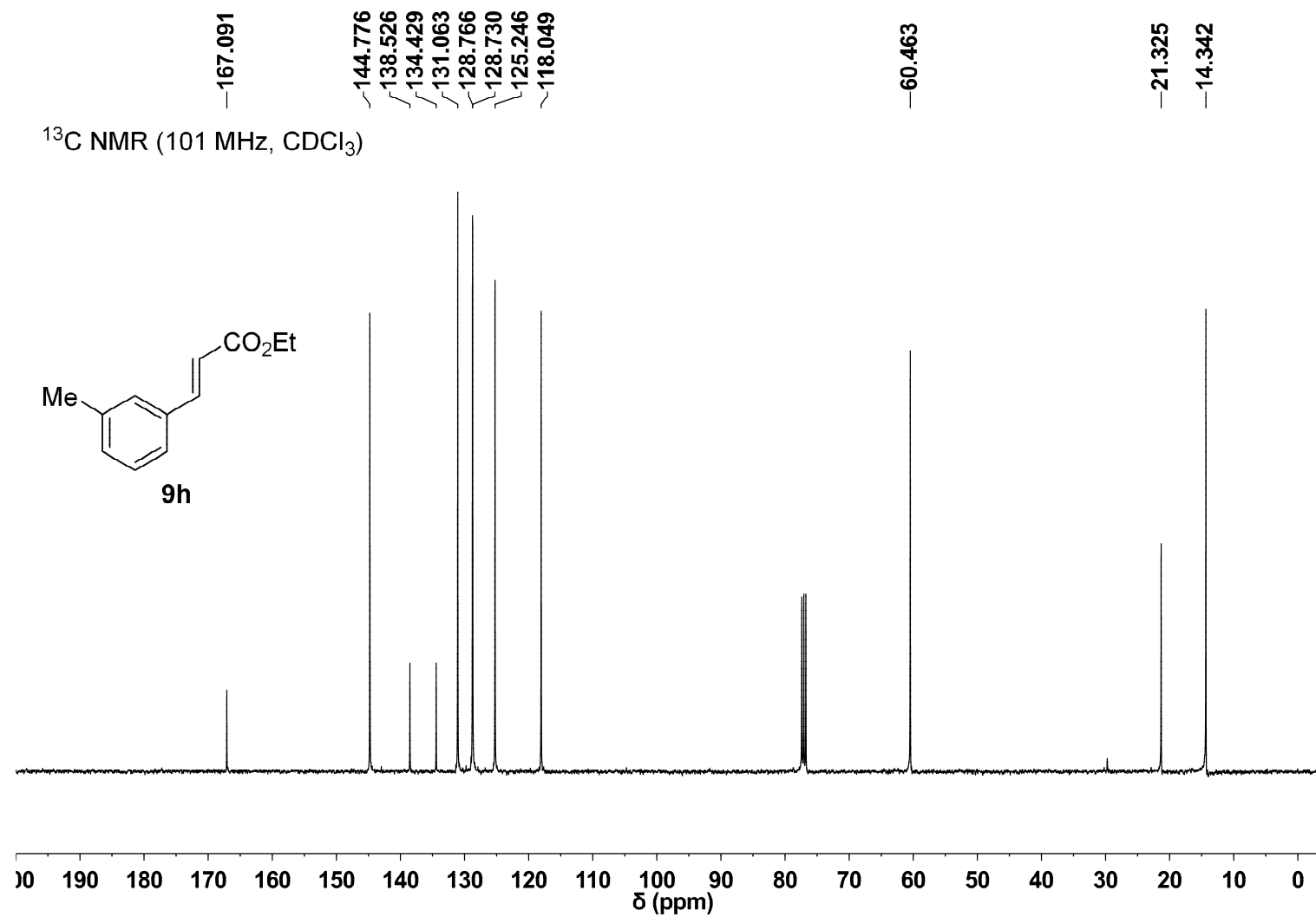


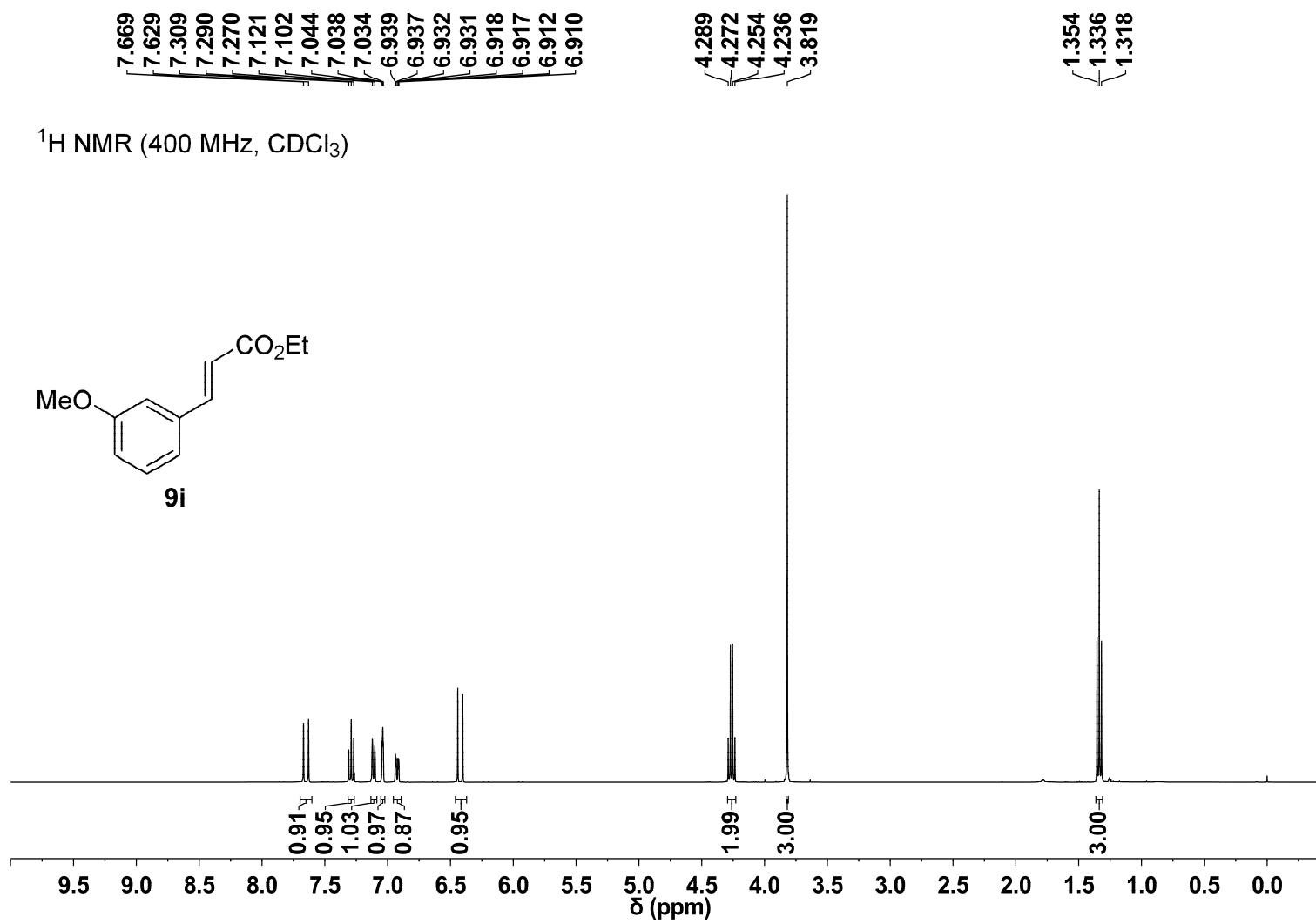


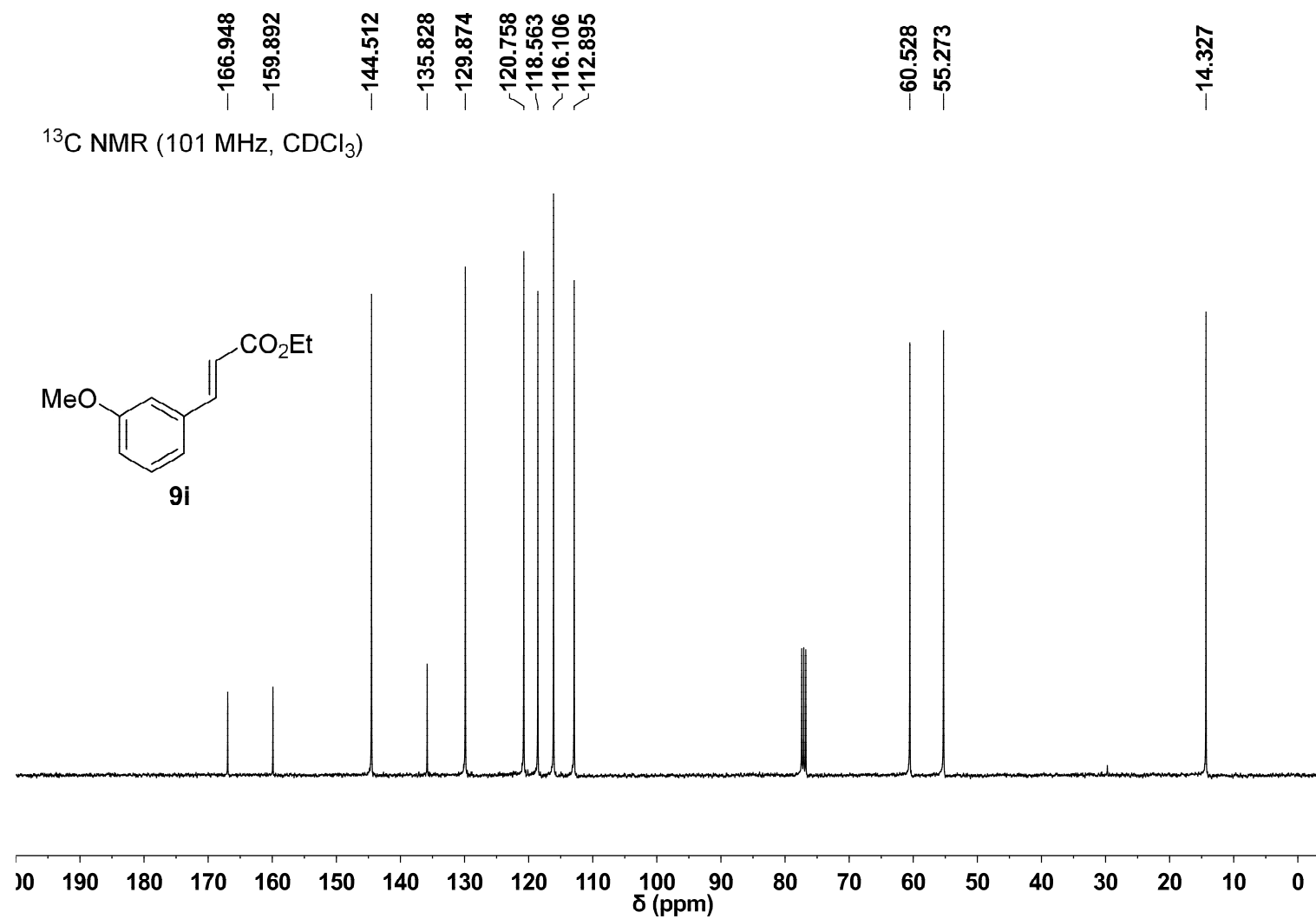


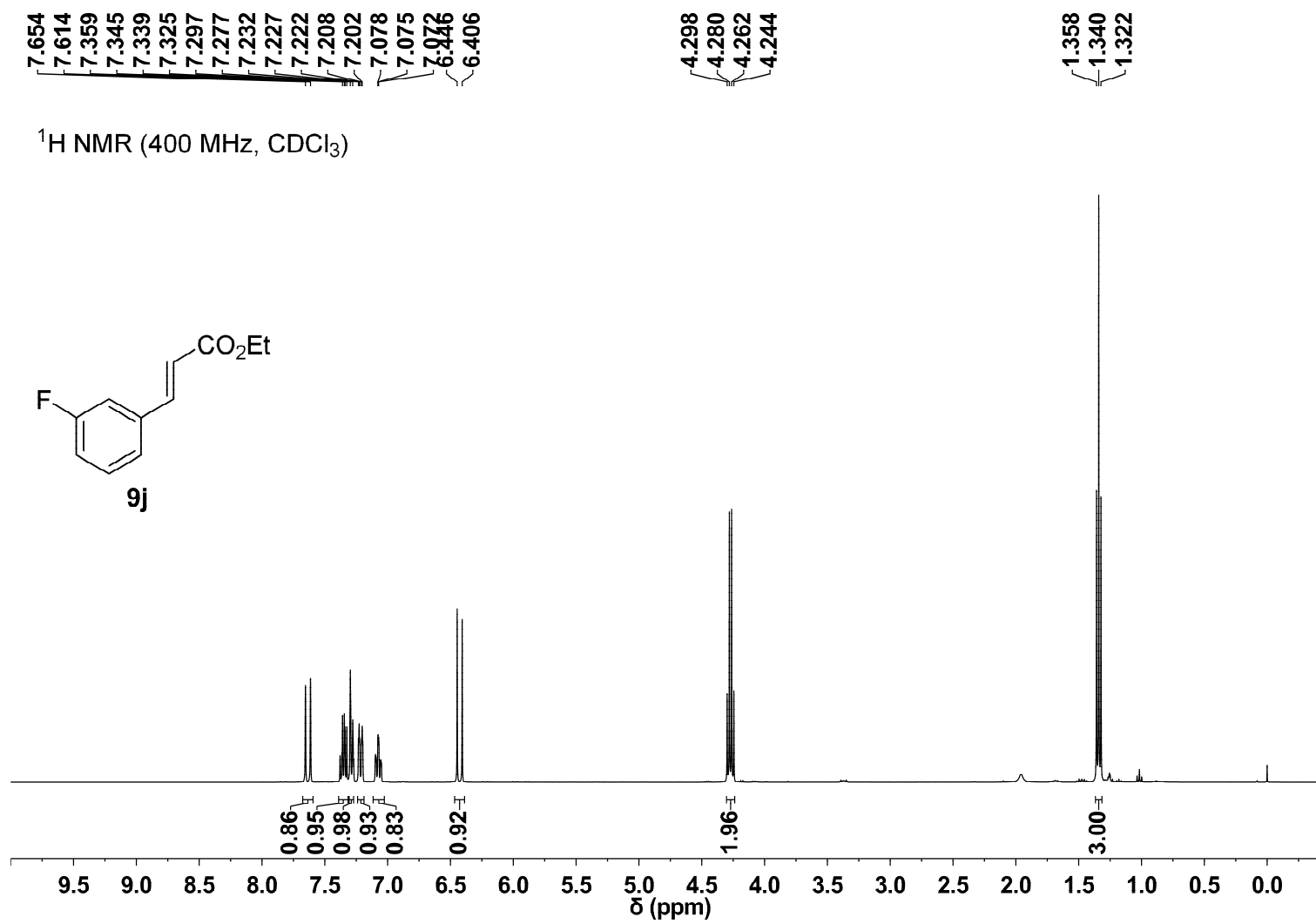


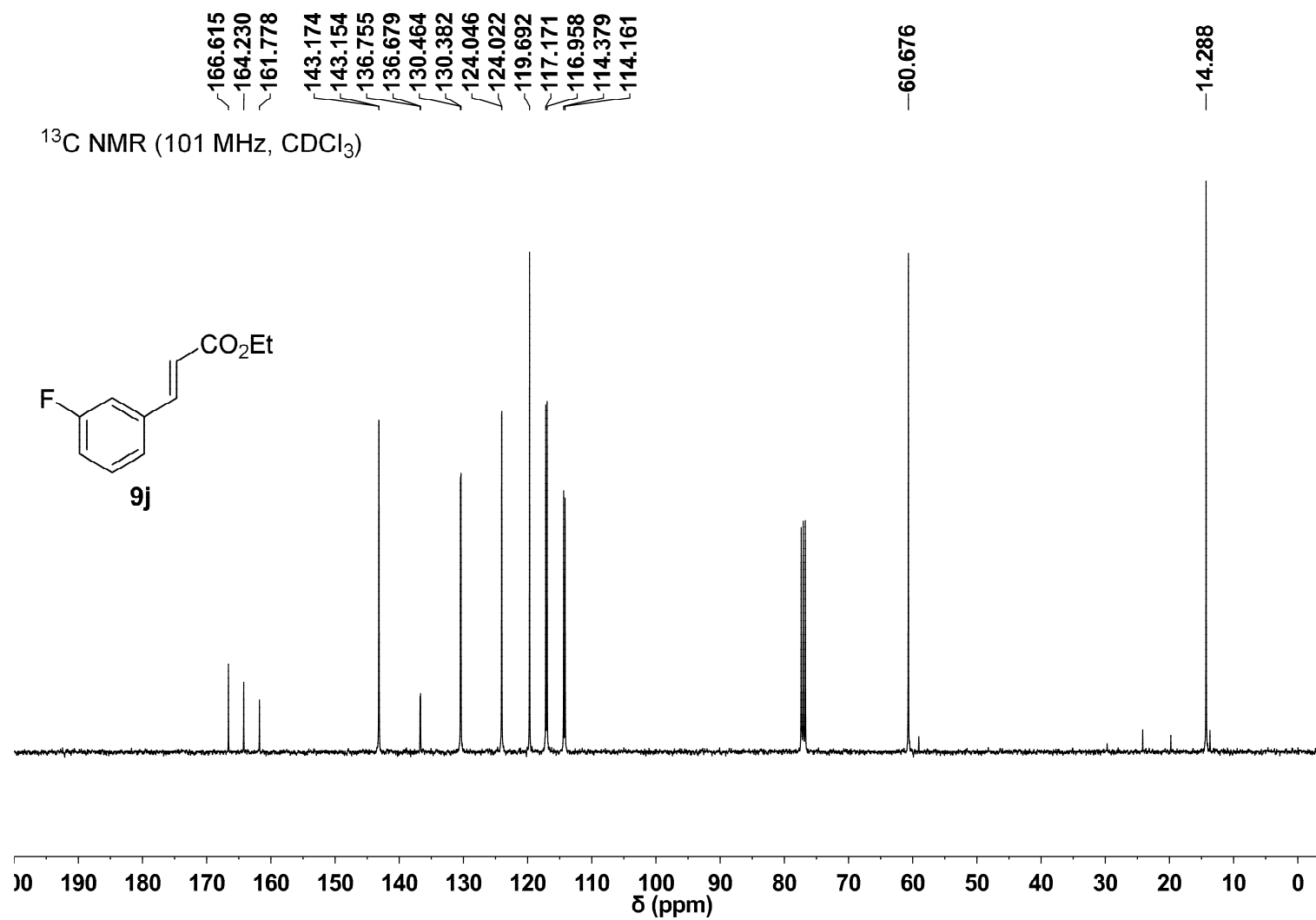


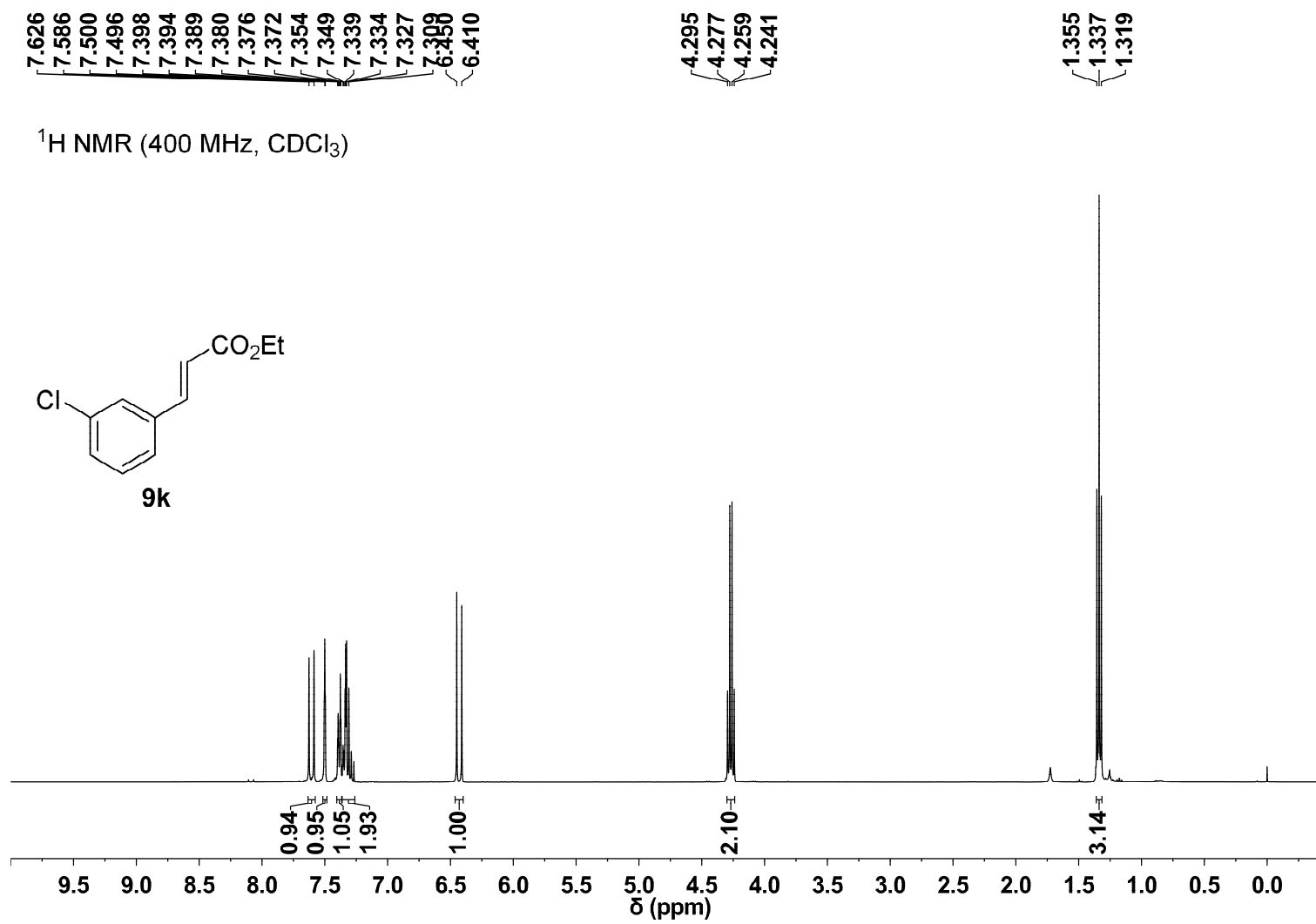


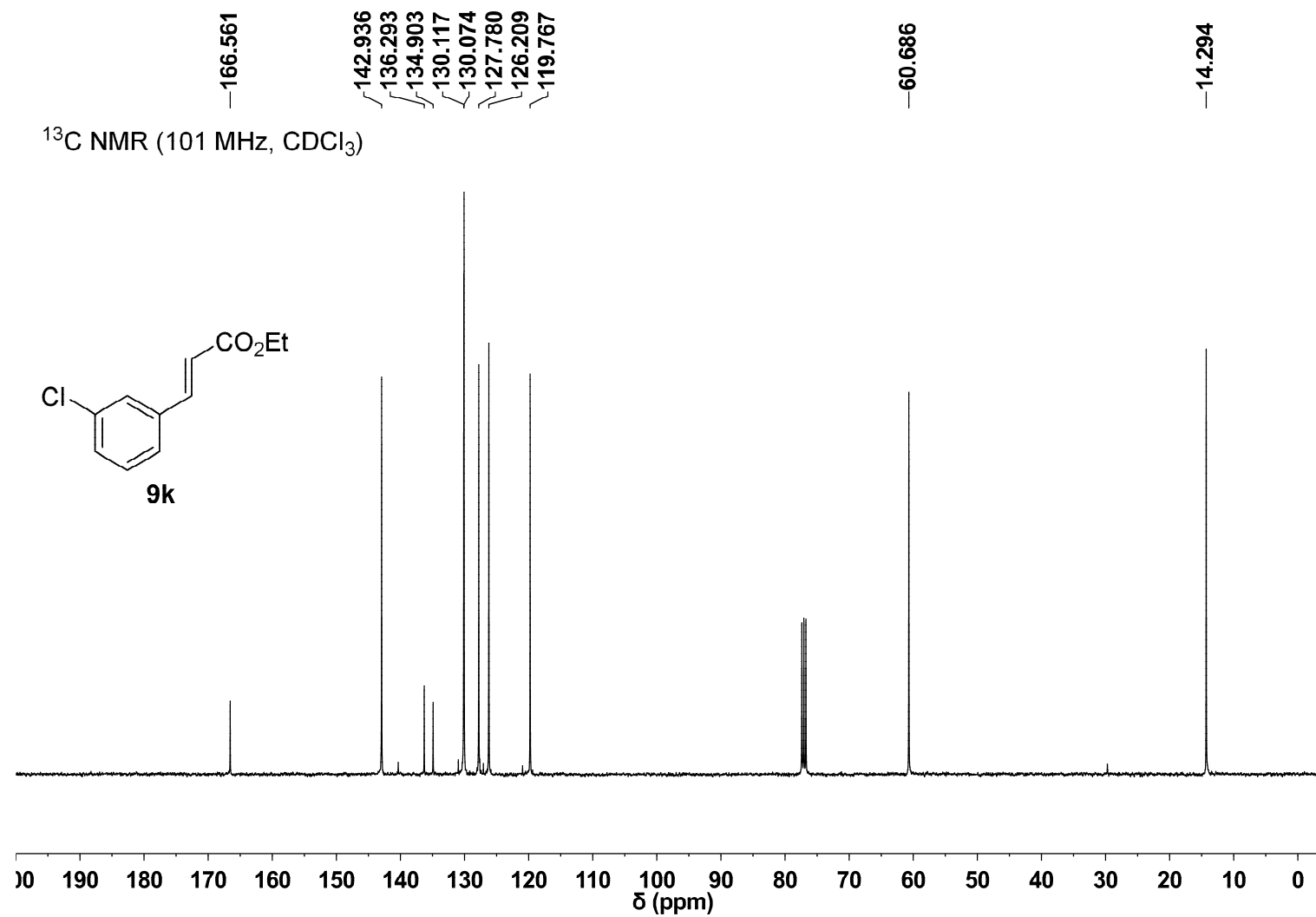


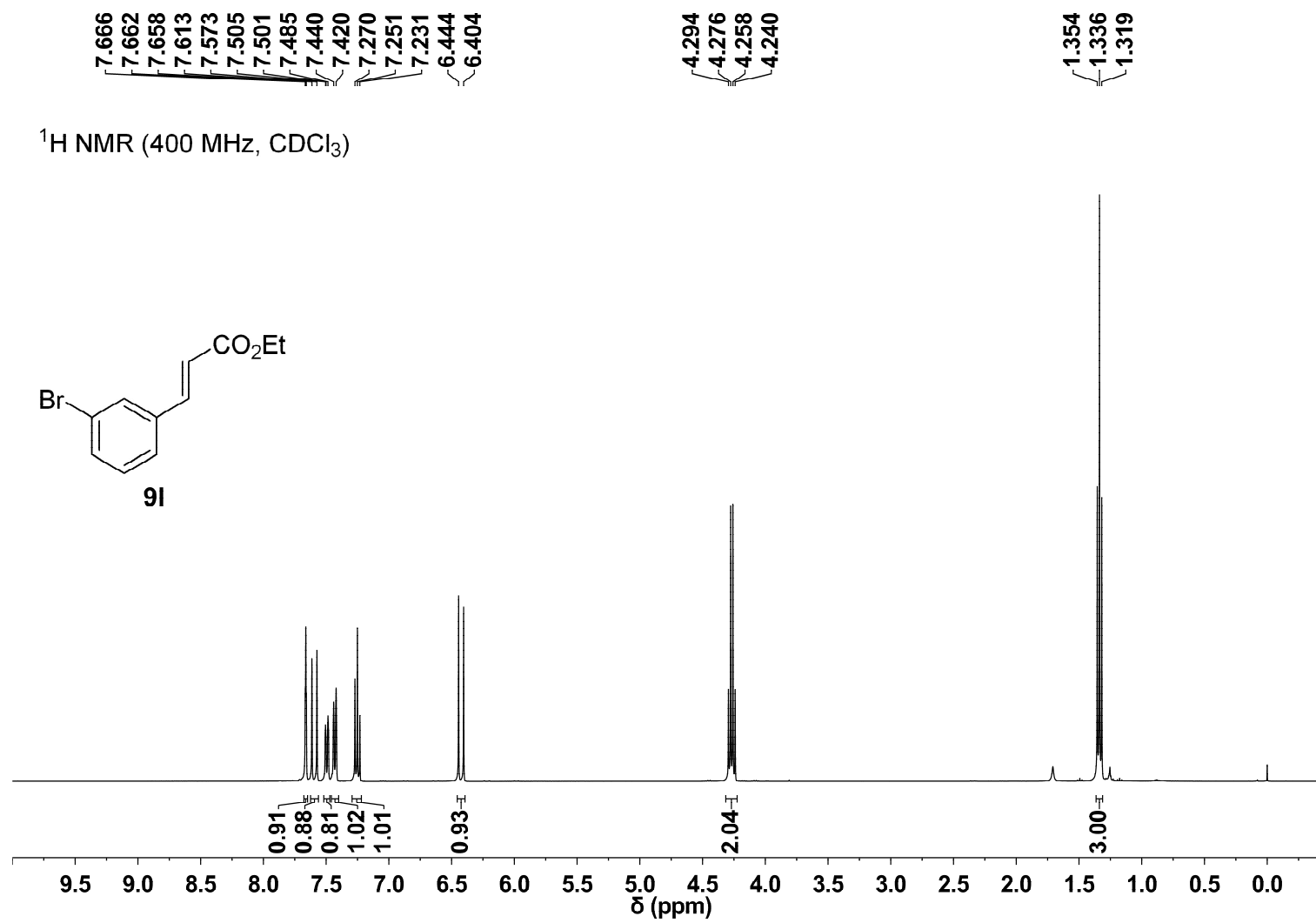




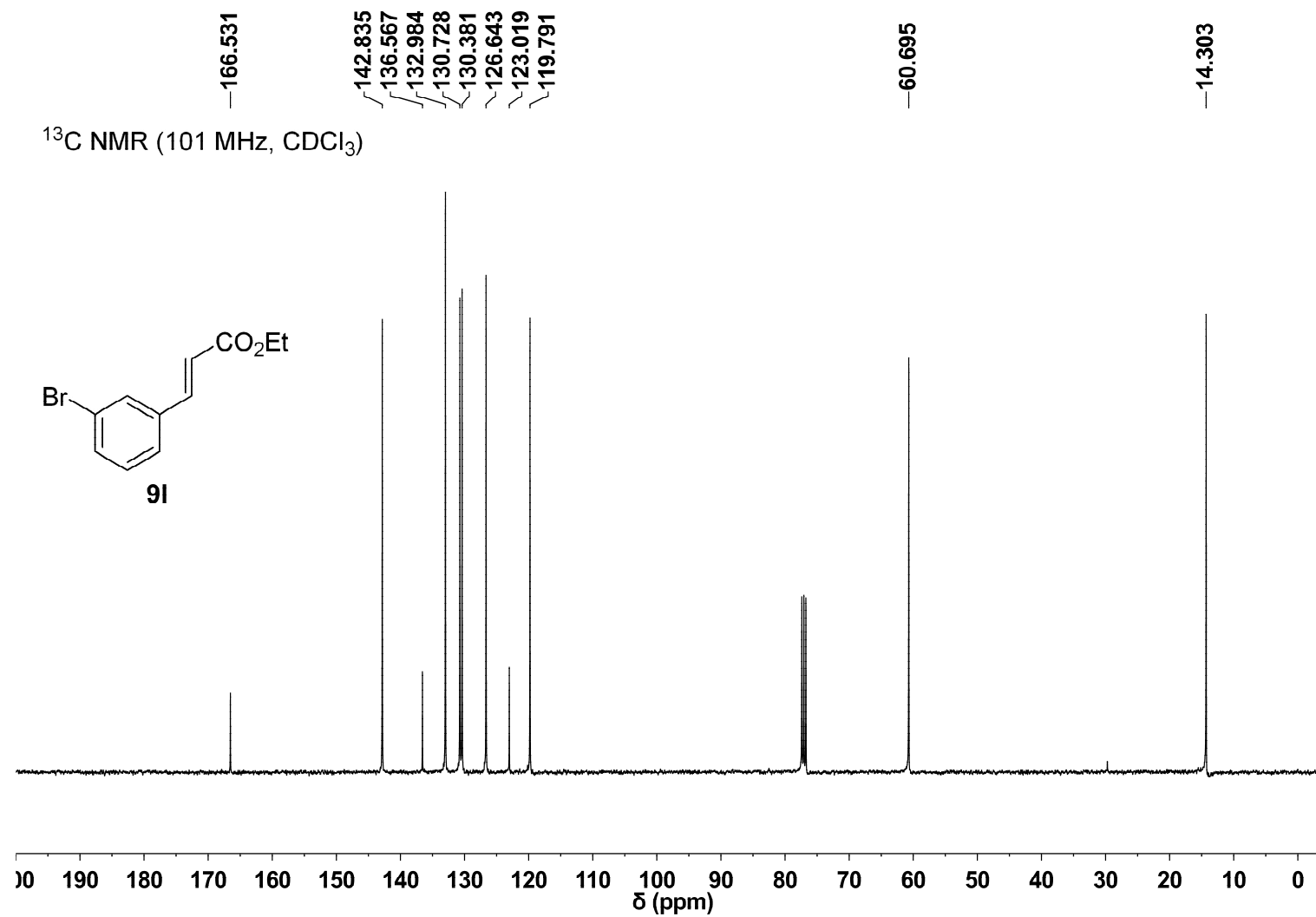


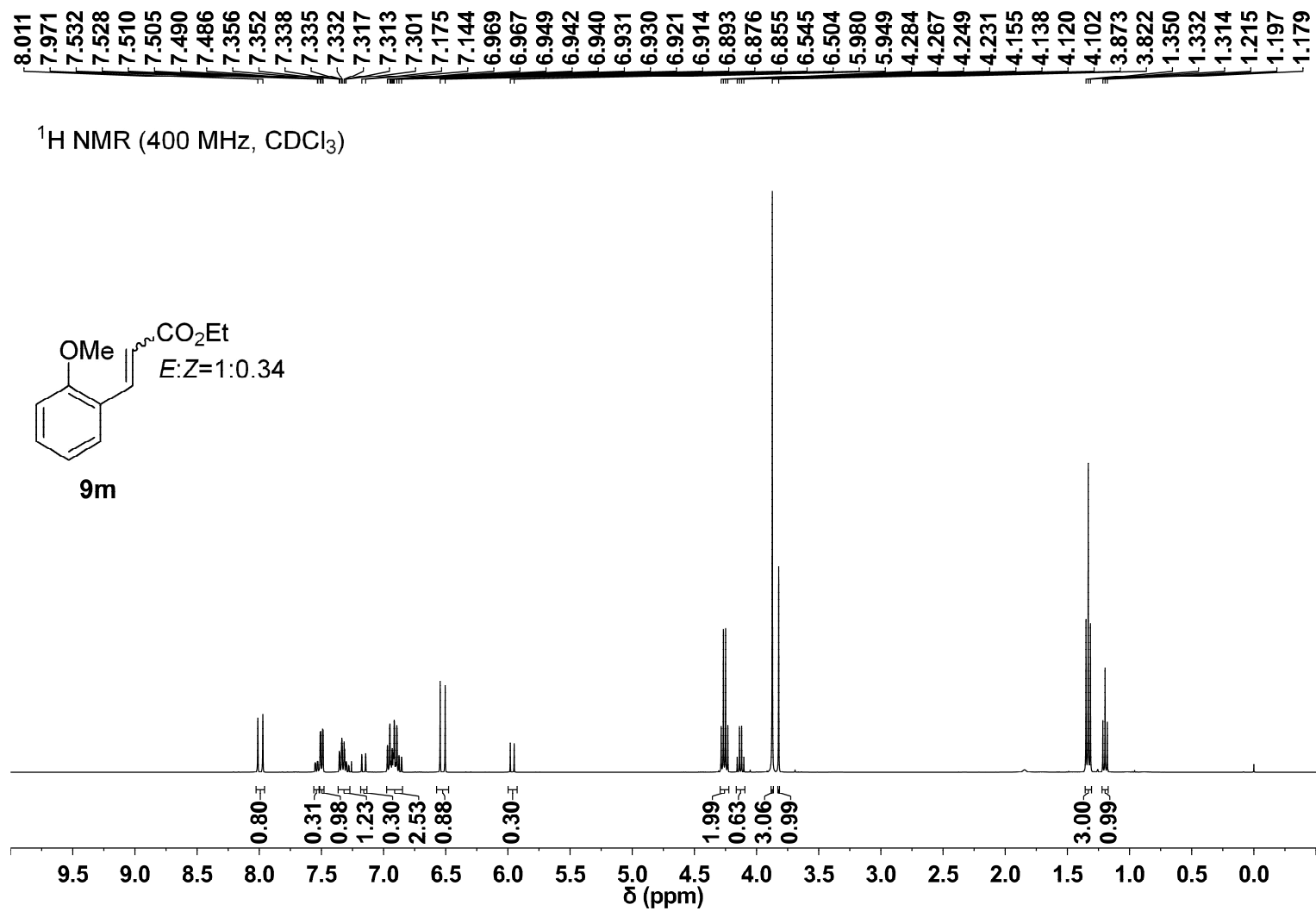


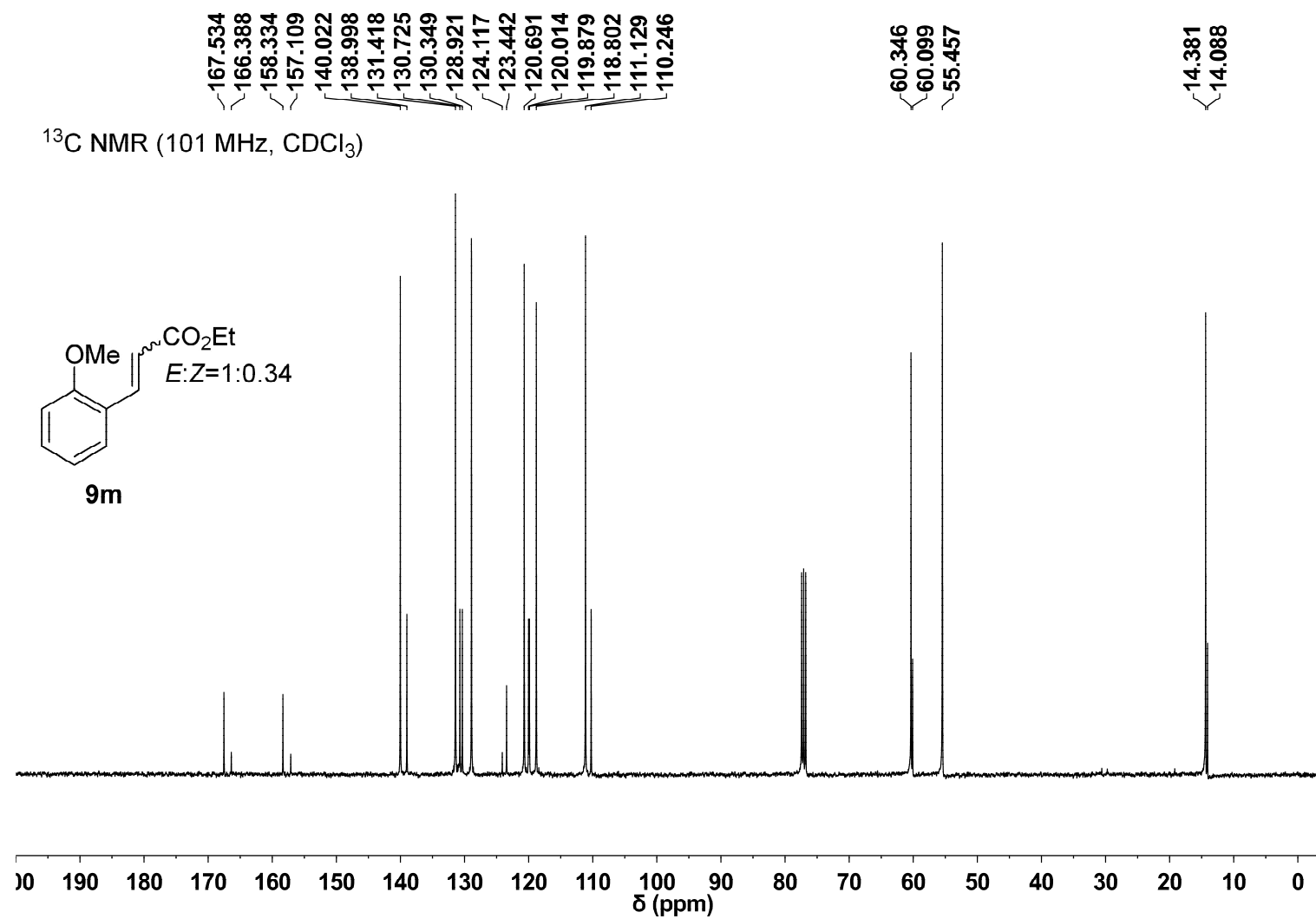






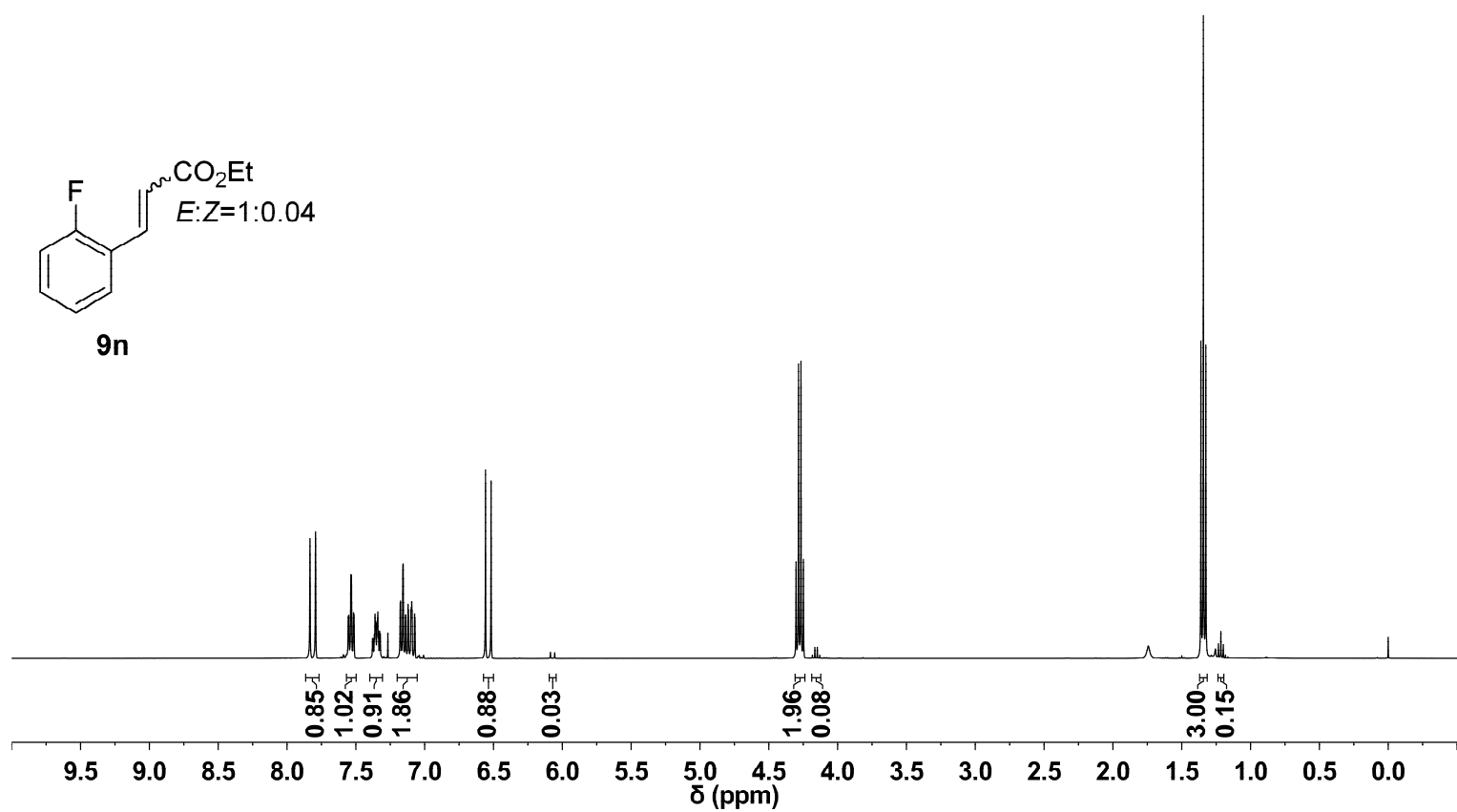


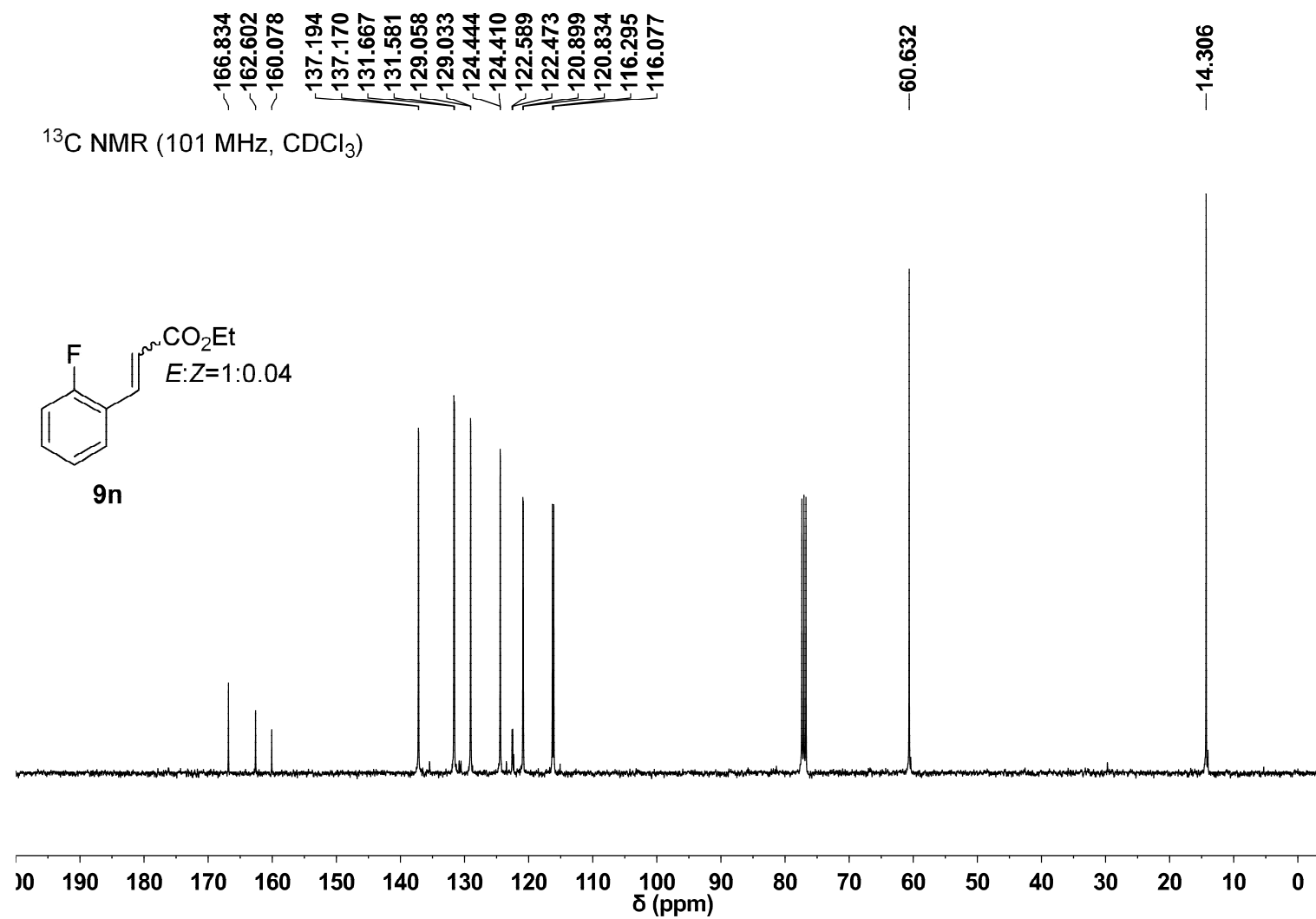


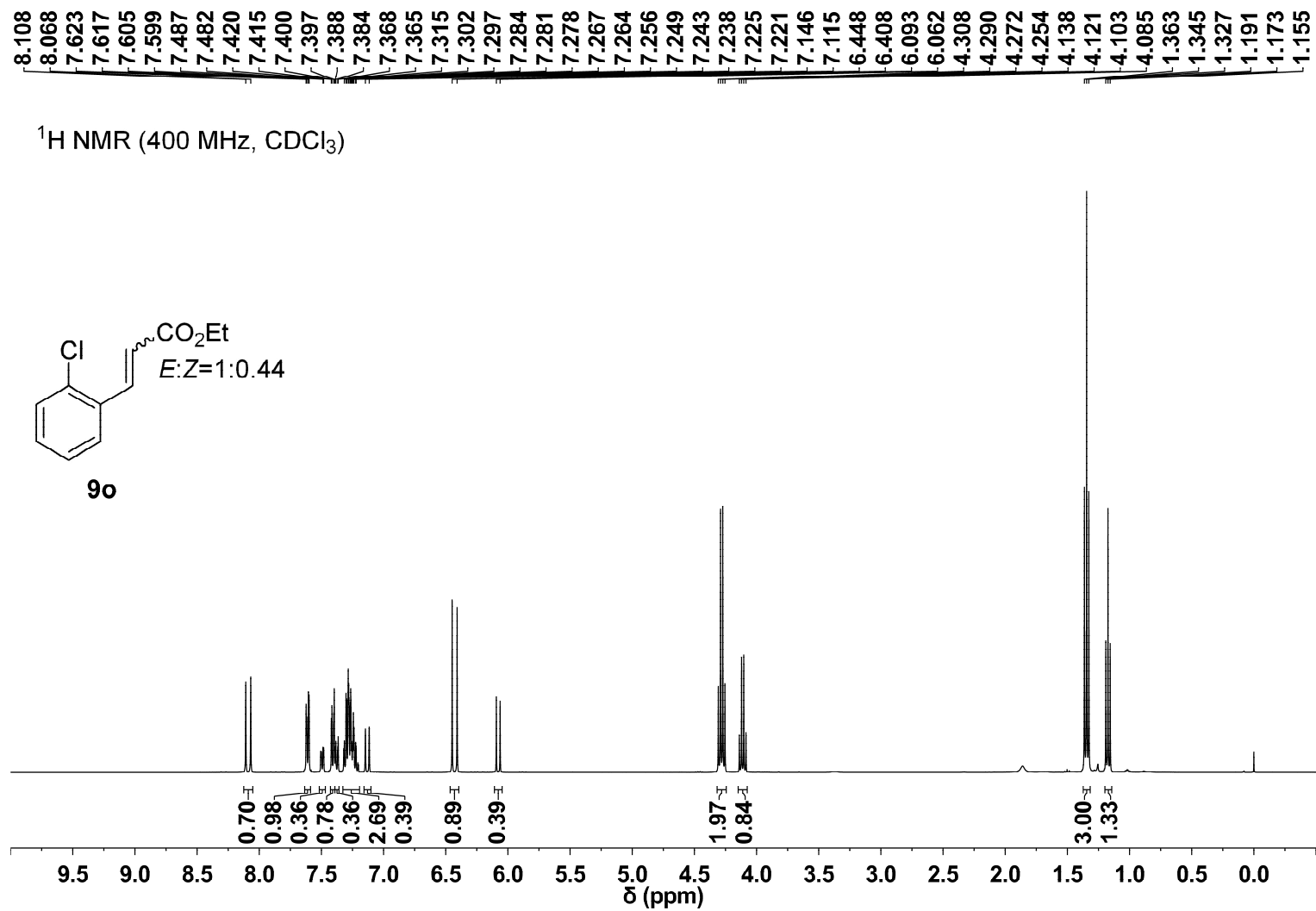


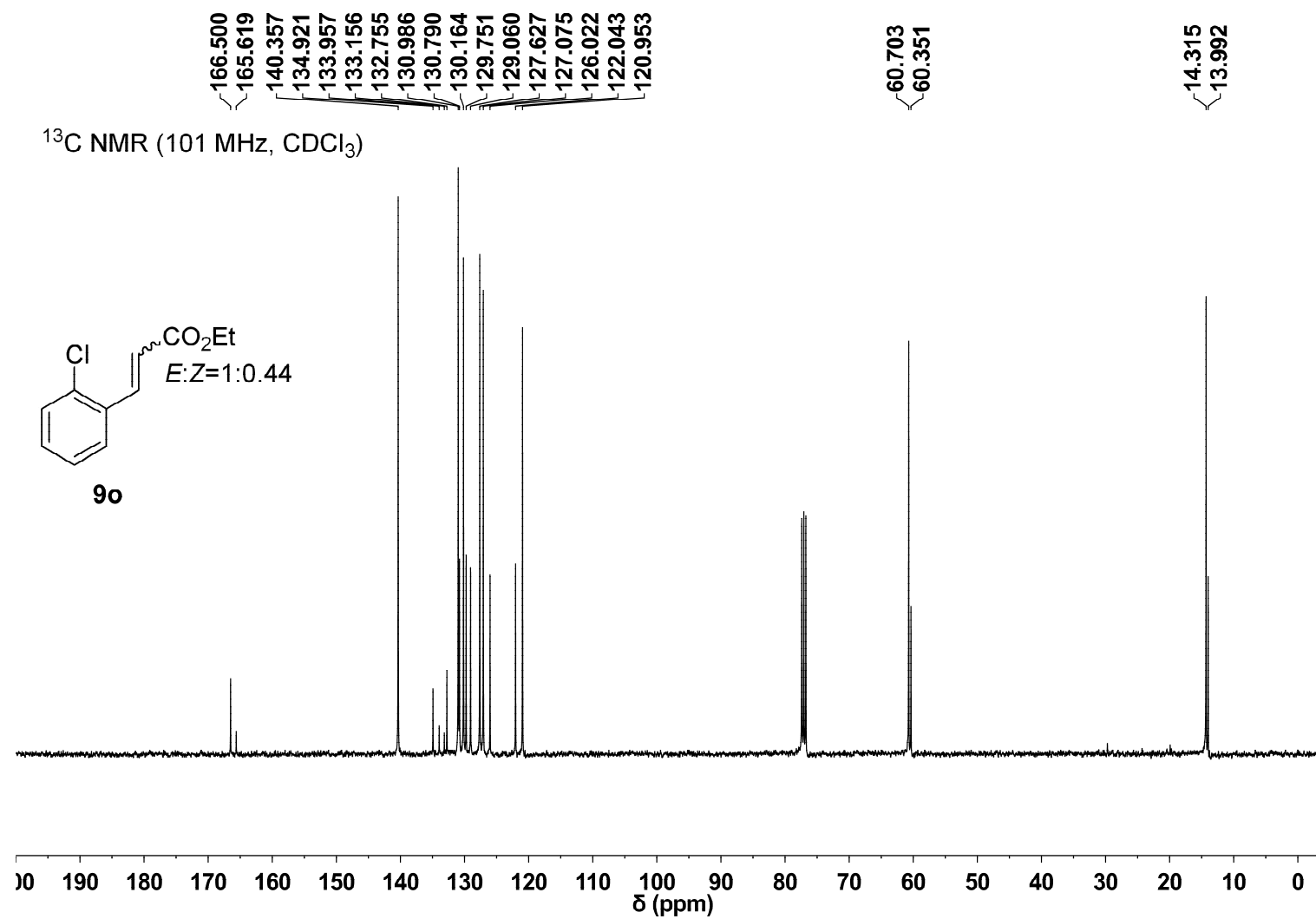
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7.379  
7.374  
7.365  
7.360  
7.358  
7.356  
7.347  
7.345  
7.342  
7.340  
7.335  
7.326  
7.322  
7.177  
7.175  
7.158  
7.156  
7.139  
7.137  
7.120  
7.118  
7.100  
7.097  
7.094  
7.091  
7.073  
7.071  
6.558  
6.517  
6.086  
4.302  
4.284  
4.266  
4.248  
4.165  
4.147  
1.361  
1.343  
1.325  
1.233  
1.215  
1.198

$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ )









8.066  
8.026  
7.615  
7.612  
7.608  
7.604  
7.595  
7.592  
7.588  
7.584  
7.578  
7.561  
7.558  
7.474  
7.459  
7.455  
7.335  
7.334  
7.316  
7.296  
7.276  
7.274  
7.236  
7.232  
7.217  
7.213  
7.198  
7.194  
7.176  
7.172  
7.094  
7.064  
6.405  
6.365  
6.072  
6.042  
4.308  
4.290  
4.273  
4.255  
4.129  
4.112  
4.094  
4.076  
1.364  
1.346  
1.328  
1.183  
1.165  
1.147

$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ )

