

# **Reduction and Reductive Deuteration of Tertiary Amides Mediated by Sodium Dispersions with Distinct Proton Donor-Dependent Chemoselectivity**

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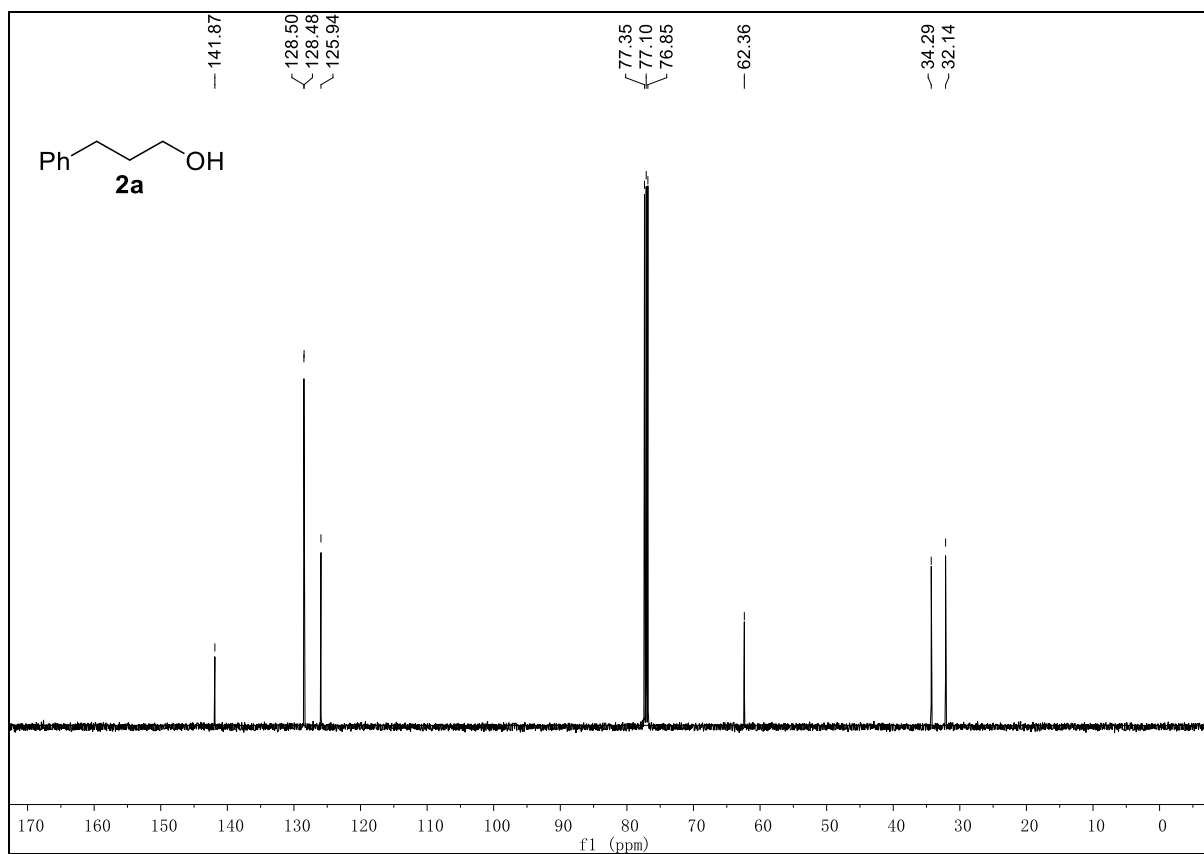
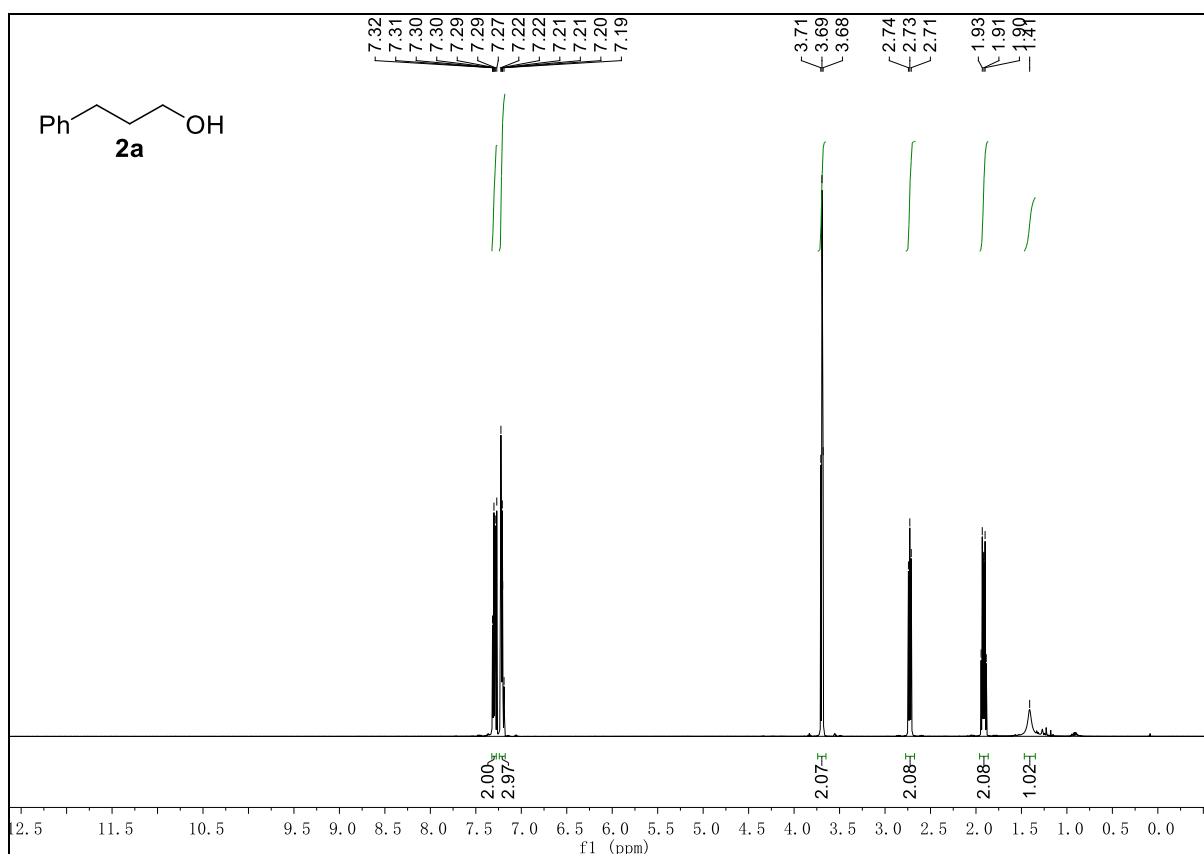
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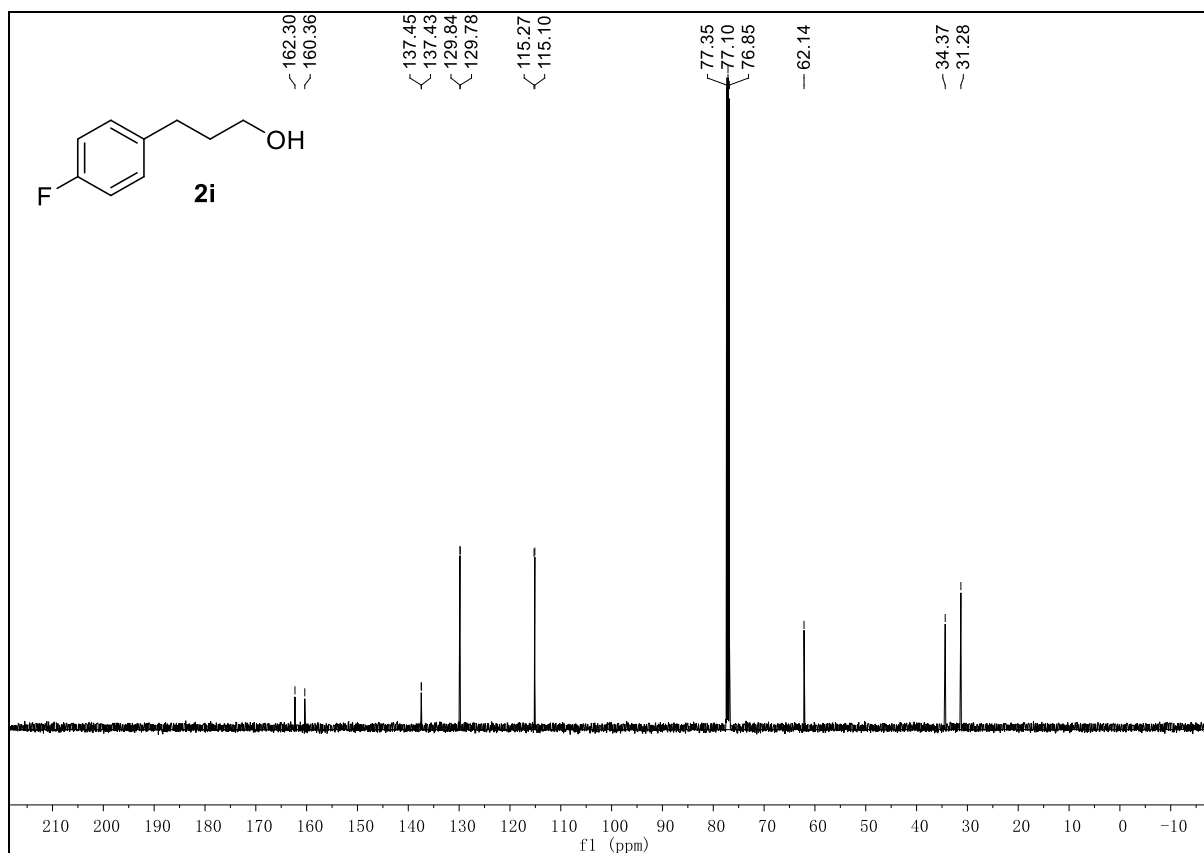
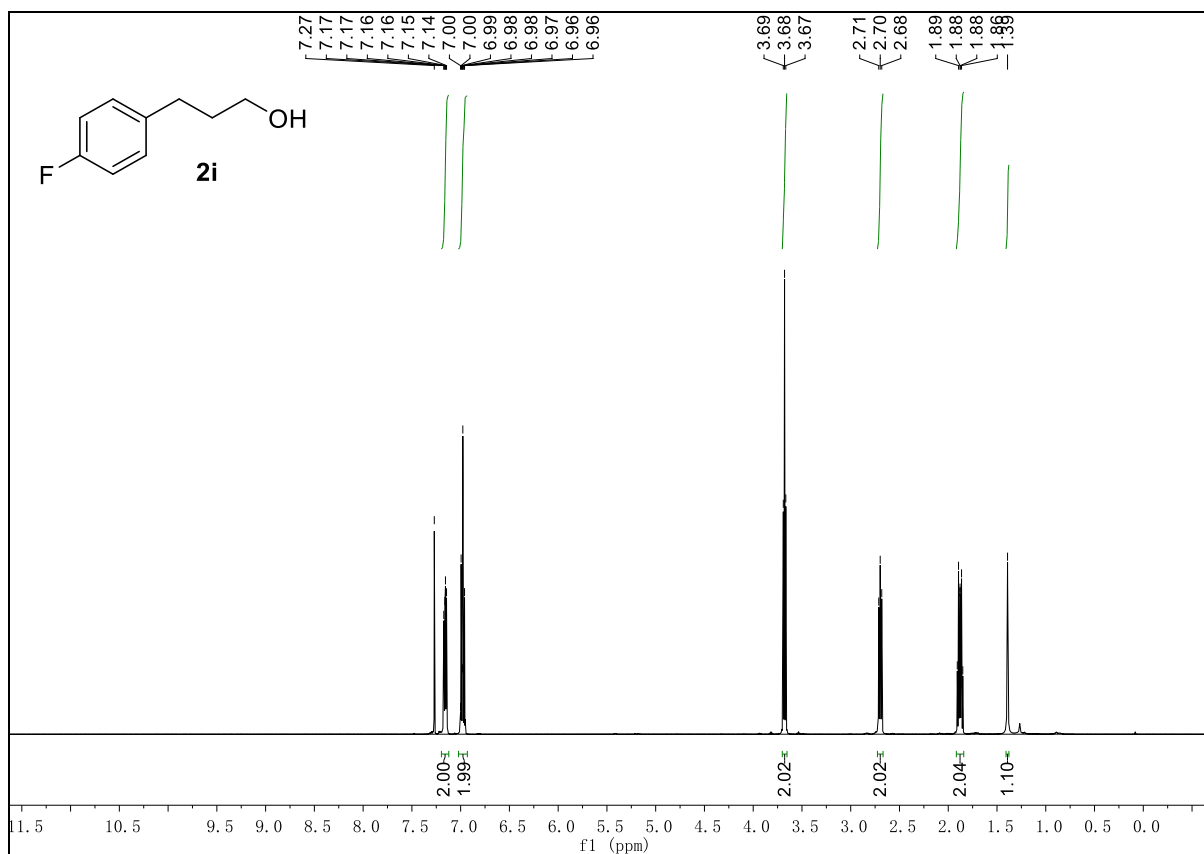
## **Supplementary Information**

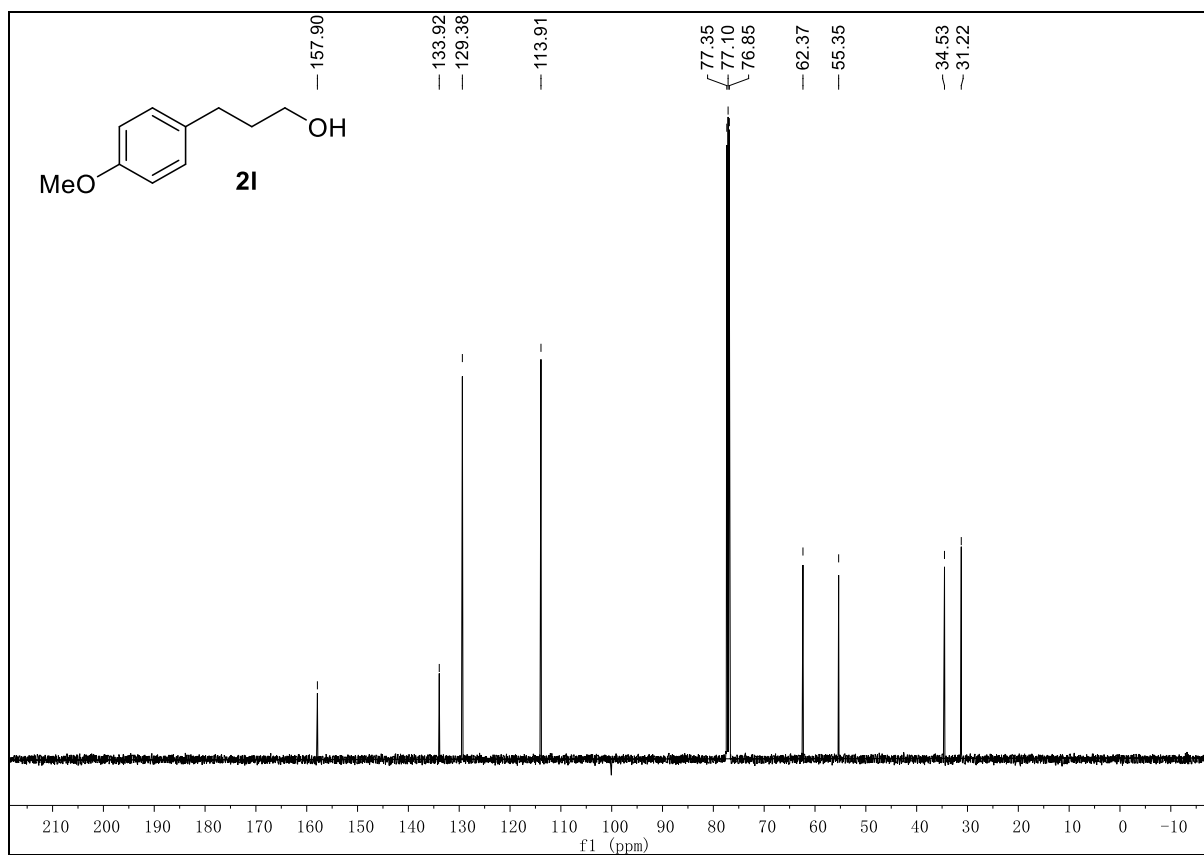
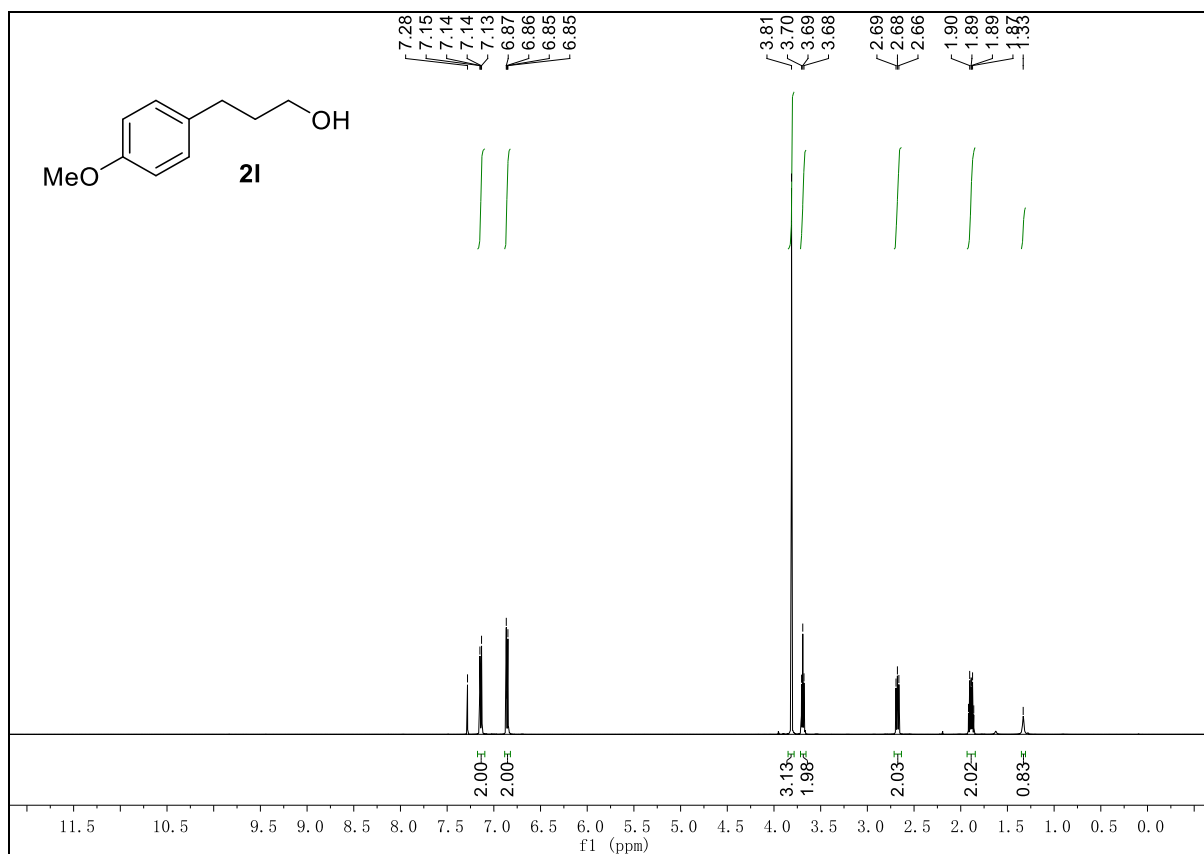
**<sup>1</sup>H and <sup>13</sup>C NMR Spectra** **S2**

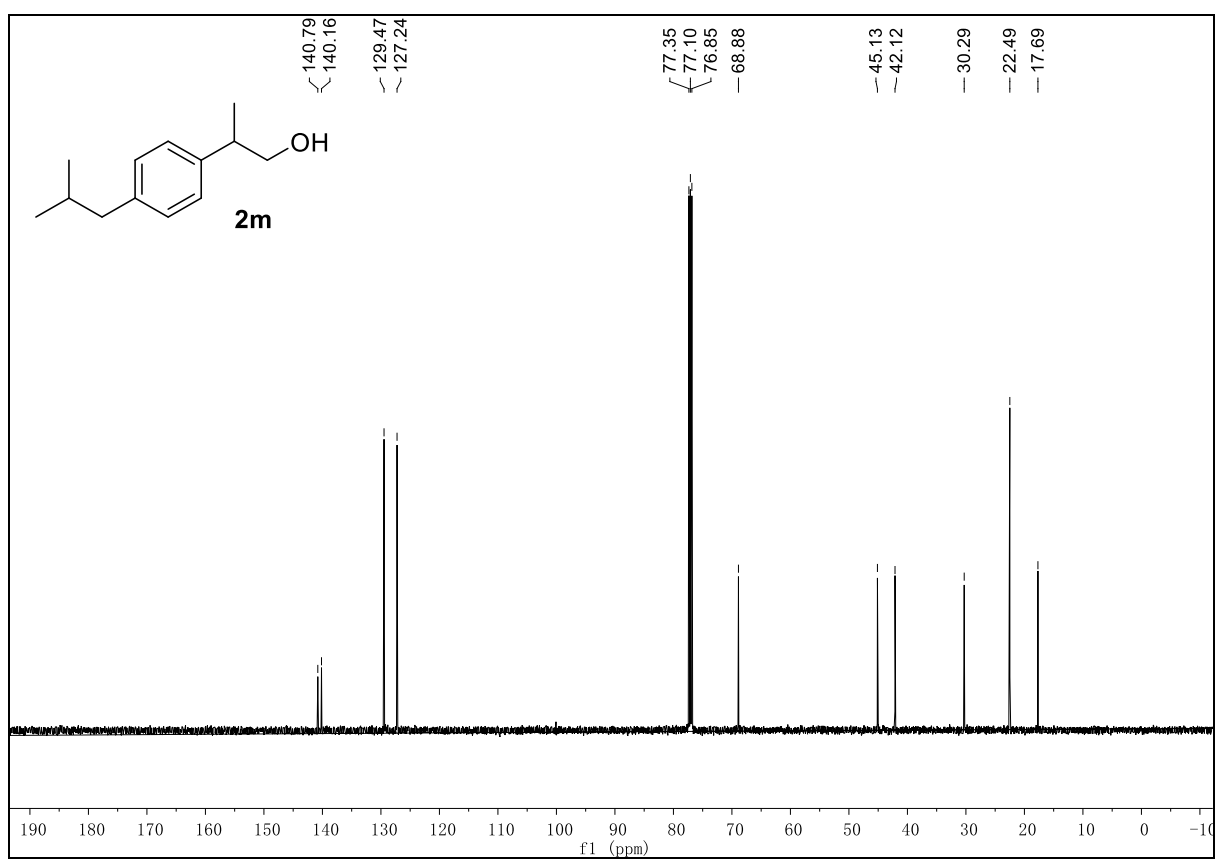
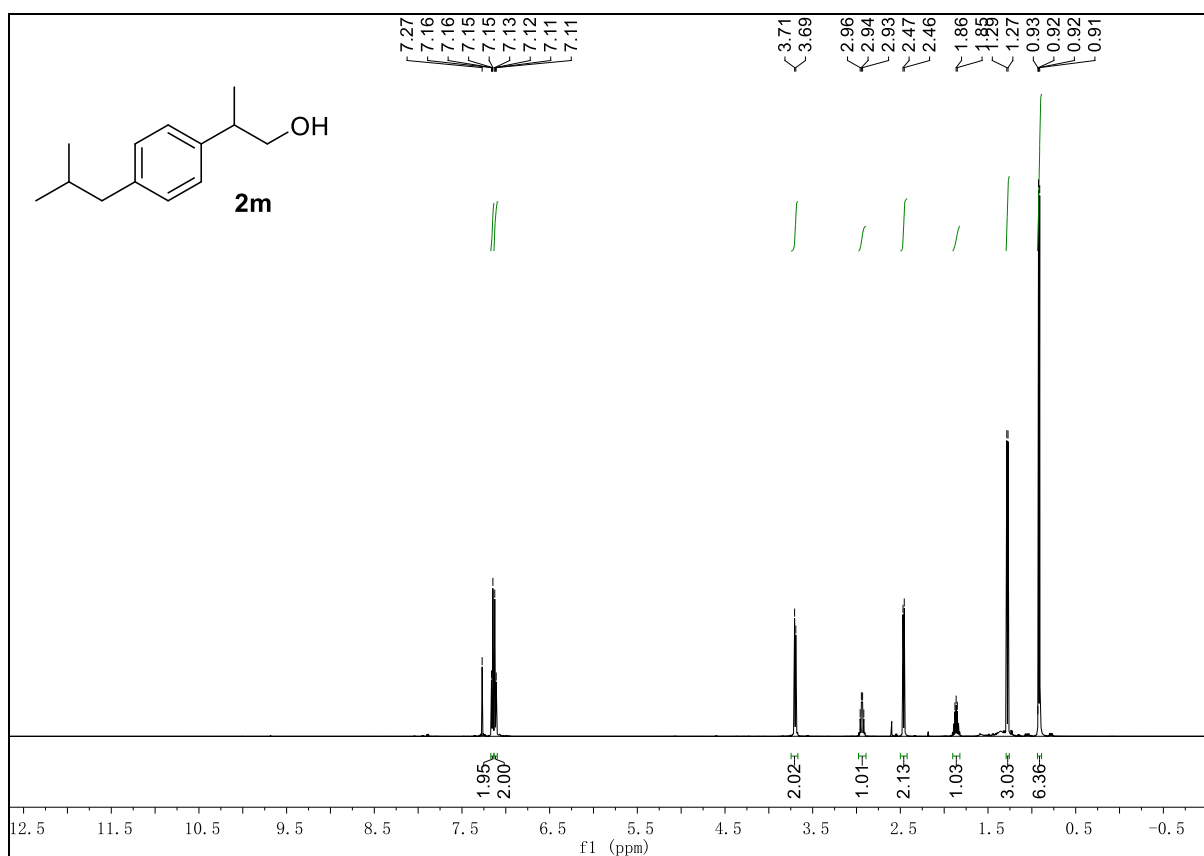
**Photos of Sodium Dispersions and Reaction** **S32**

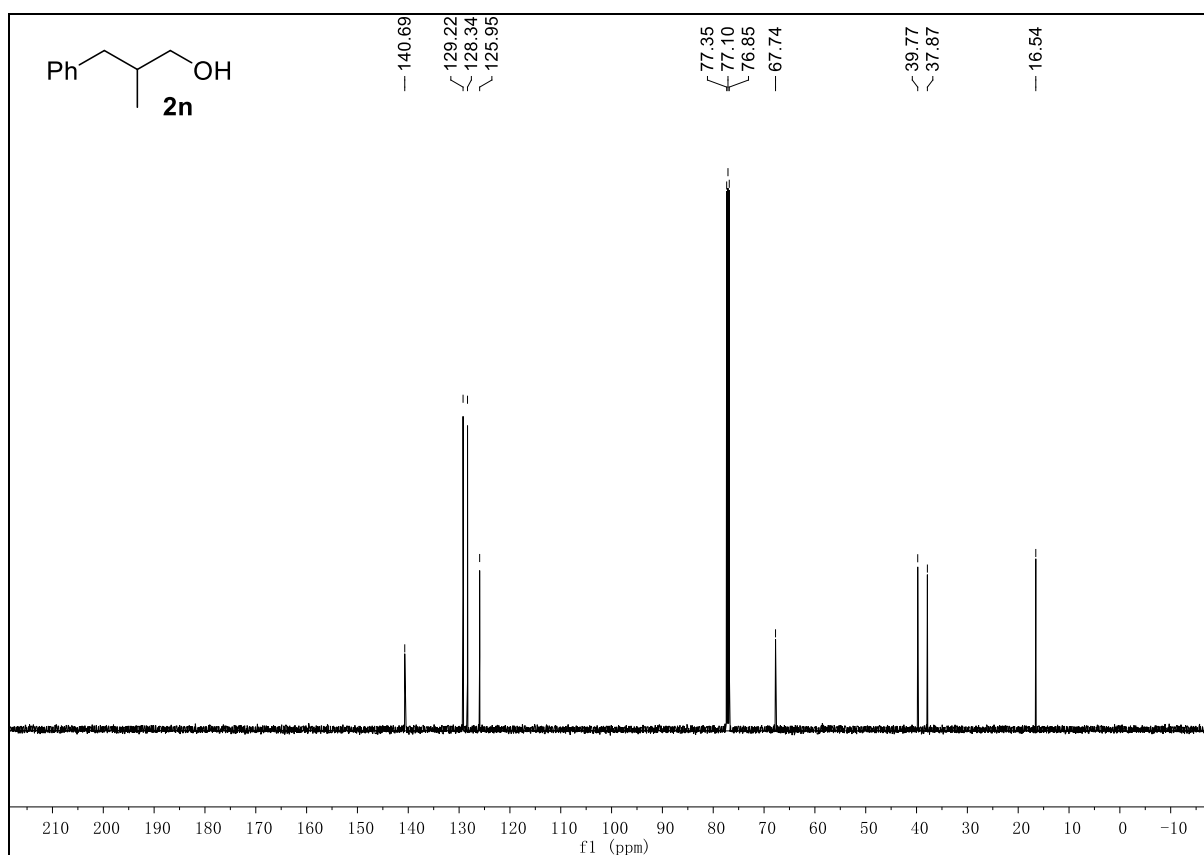
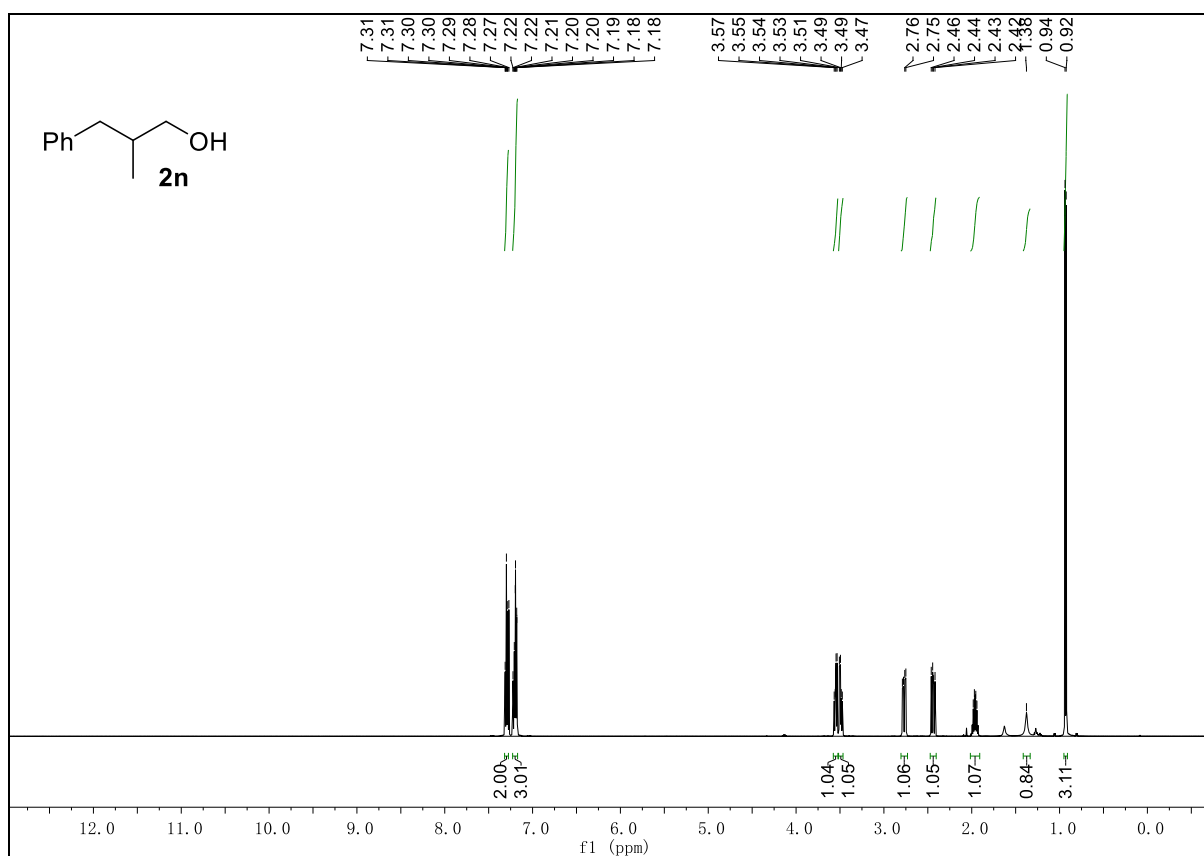
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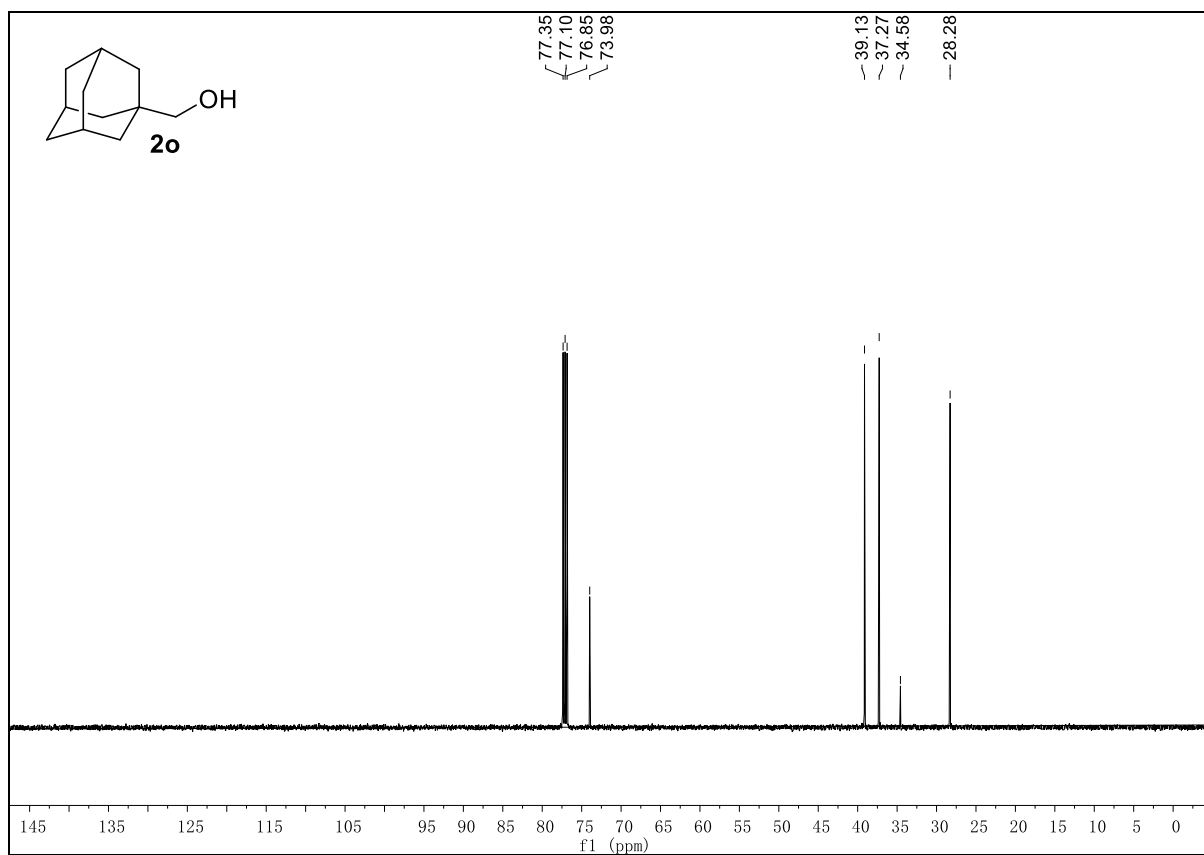
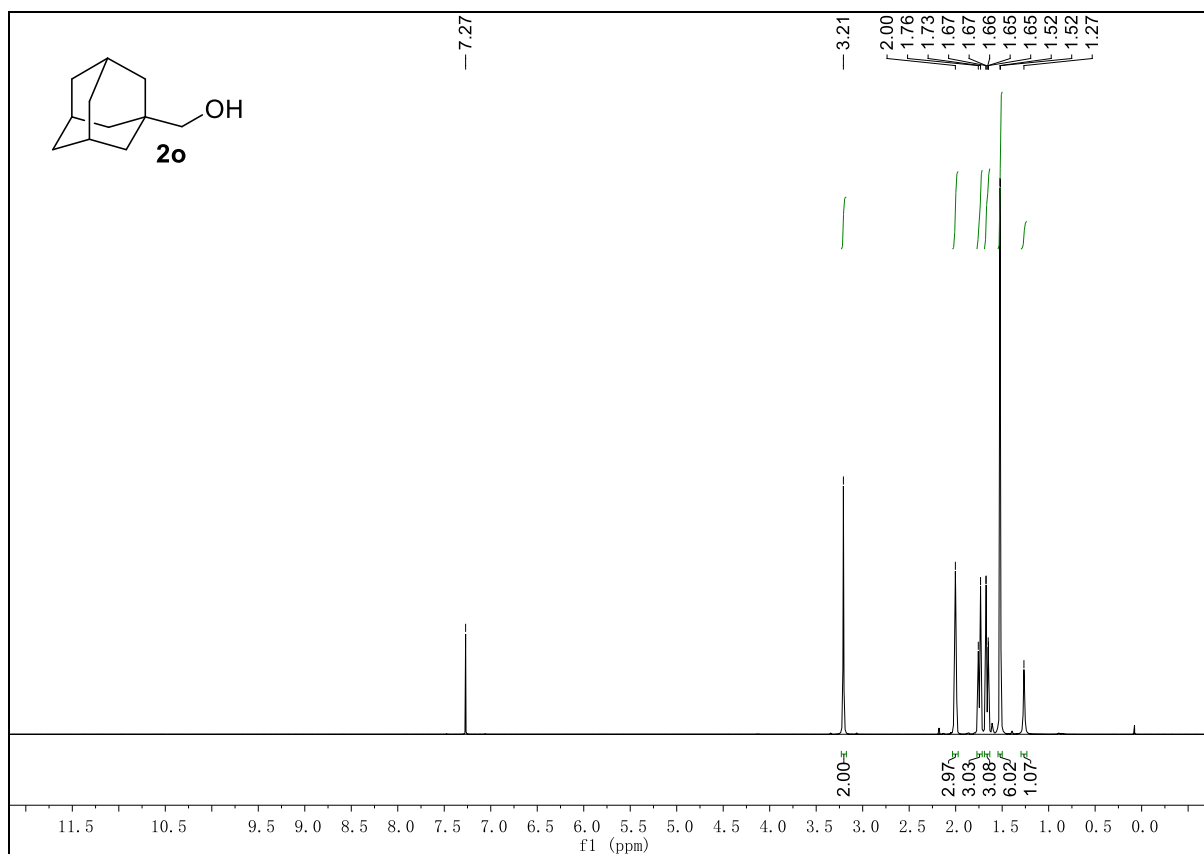


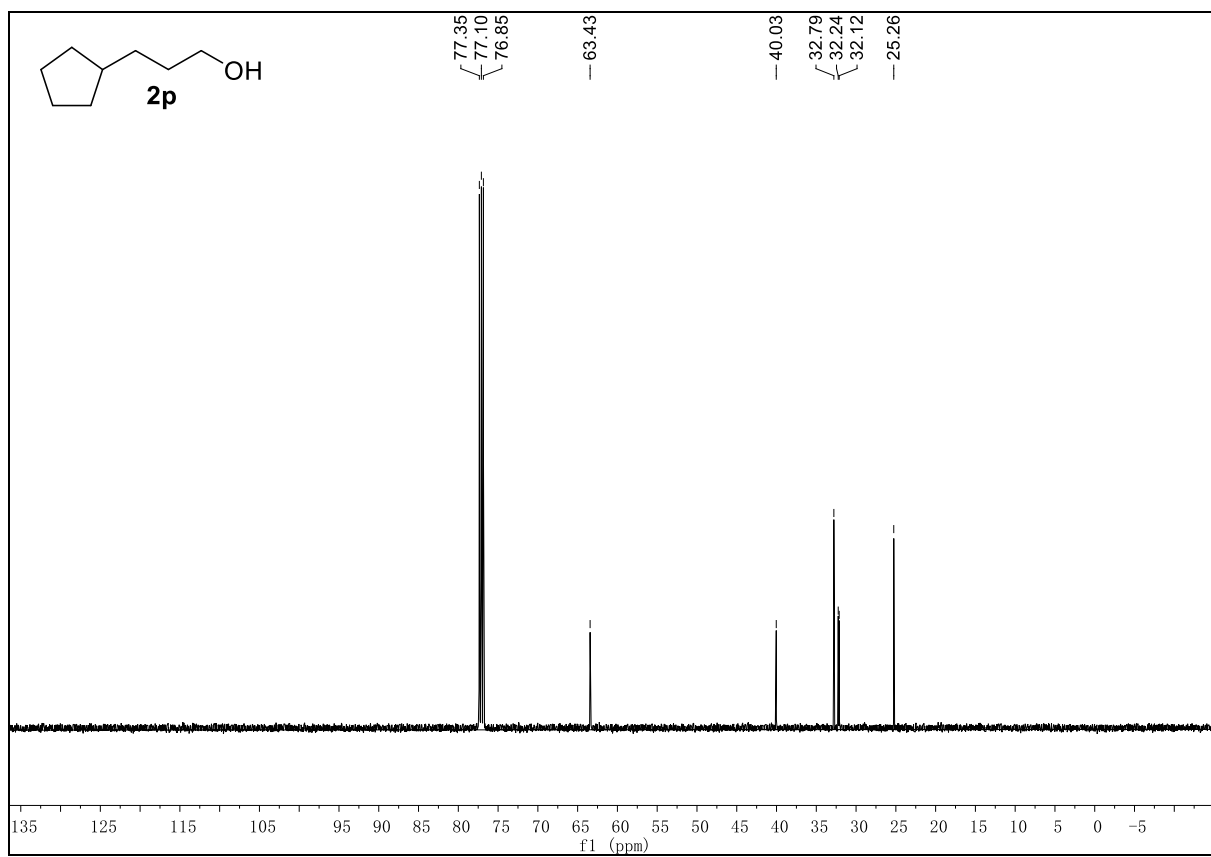
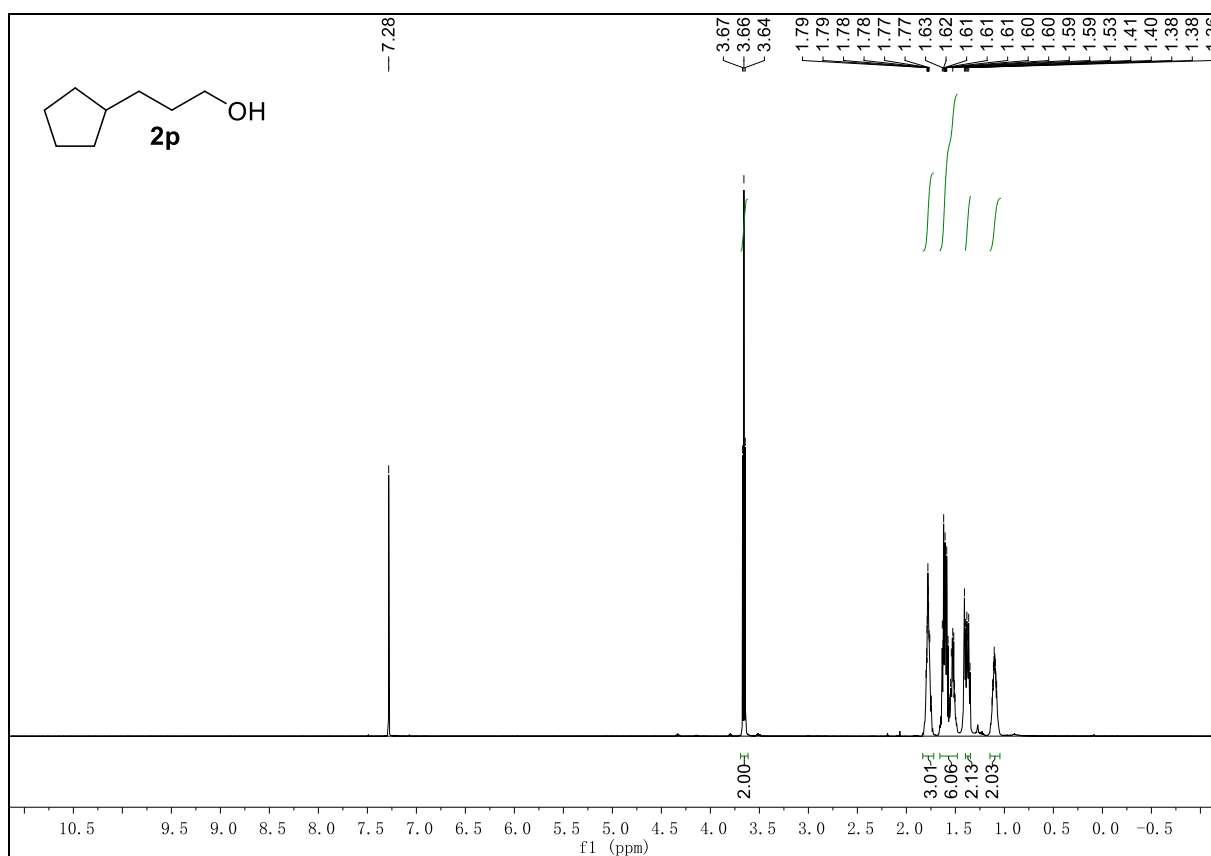




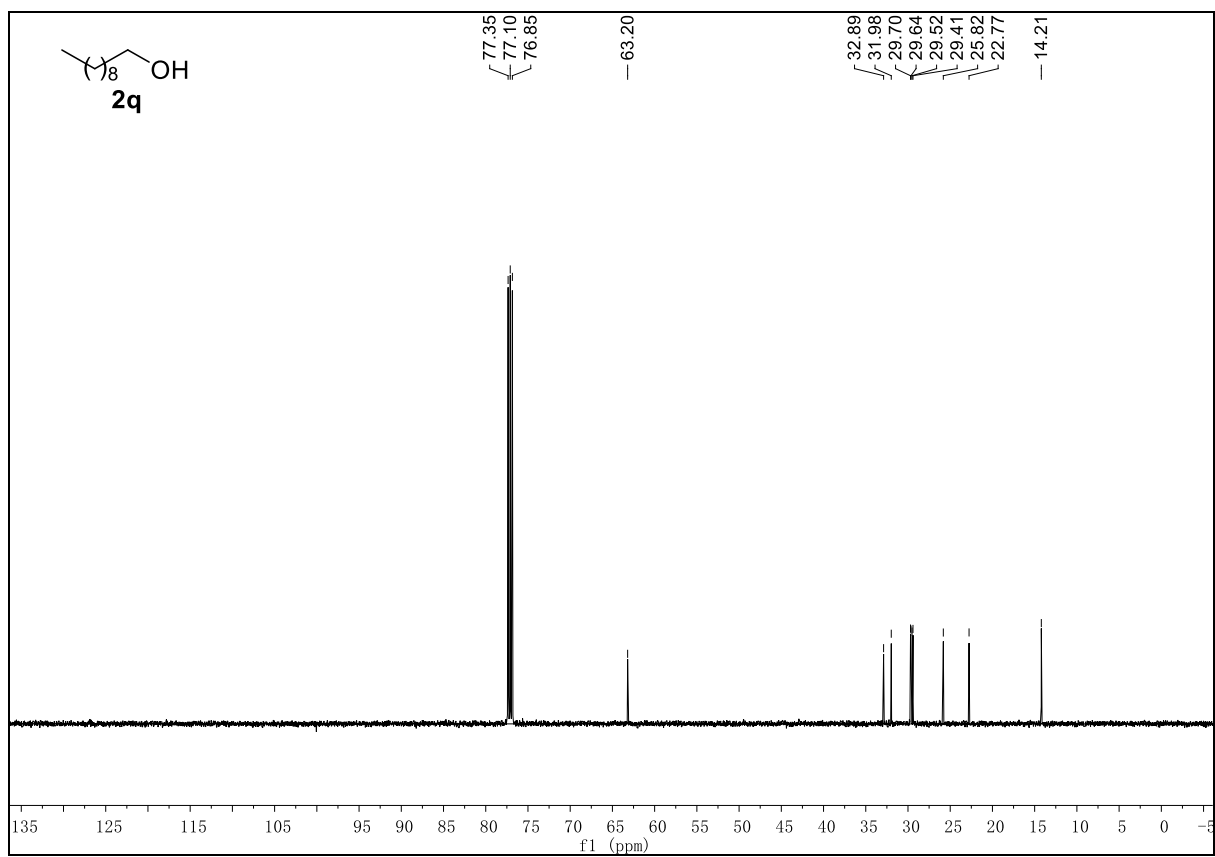
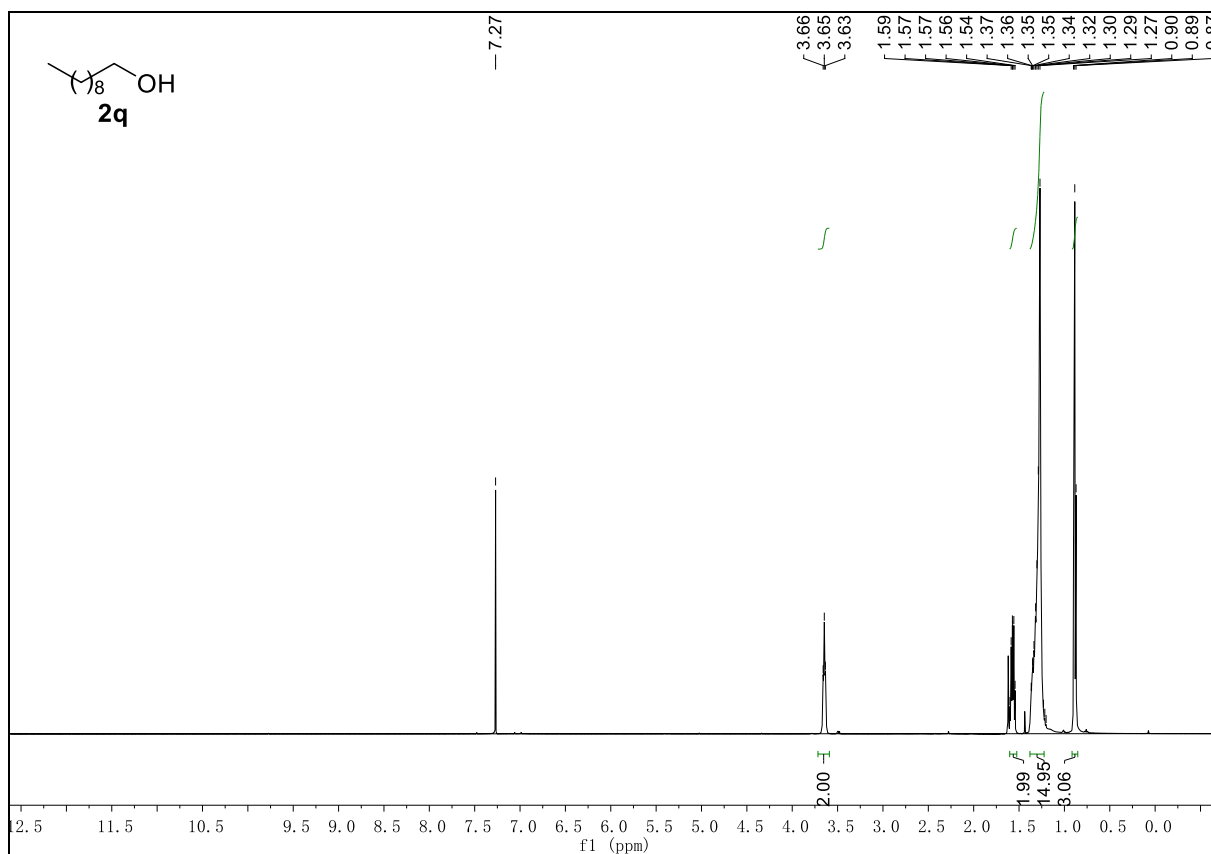


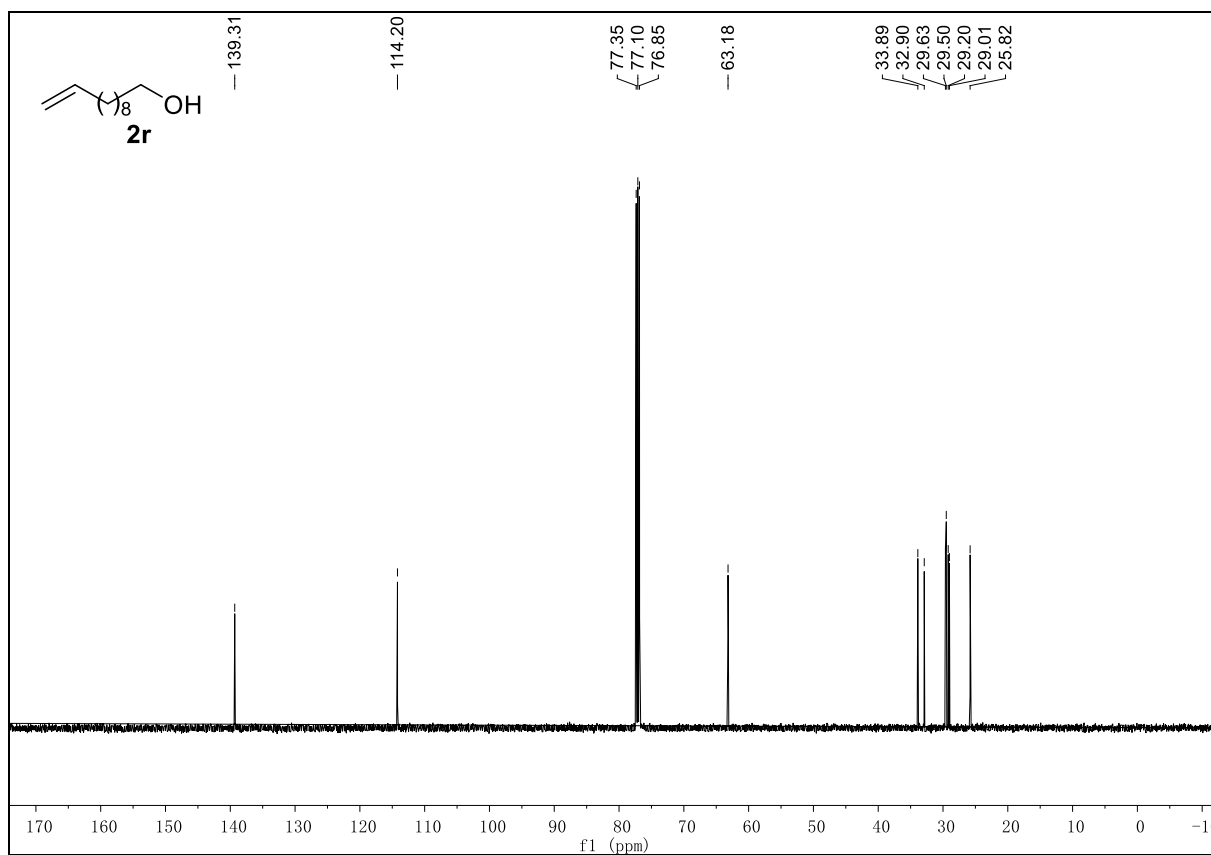
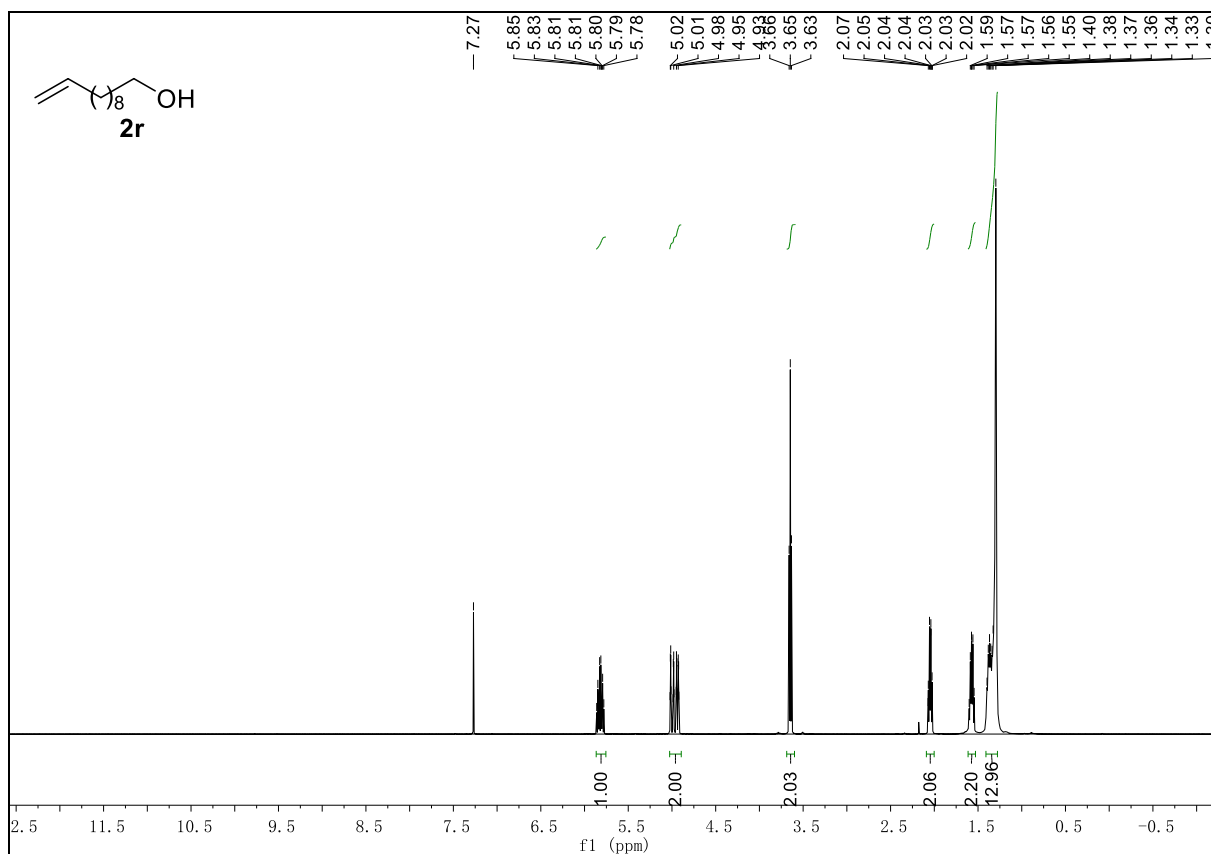


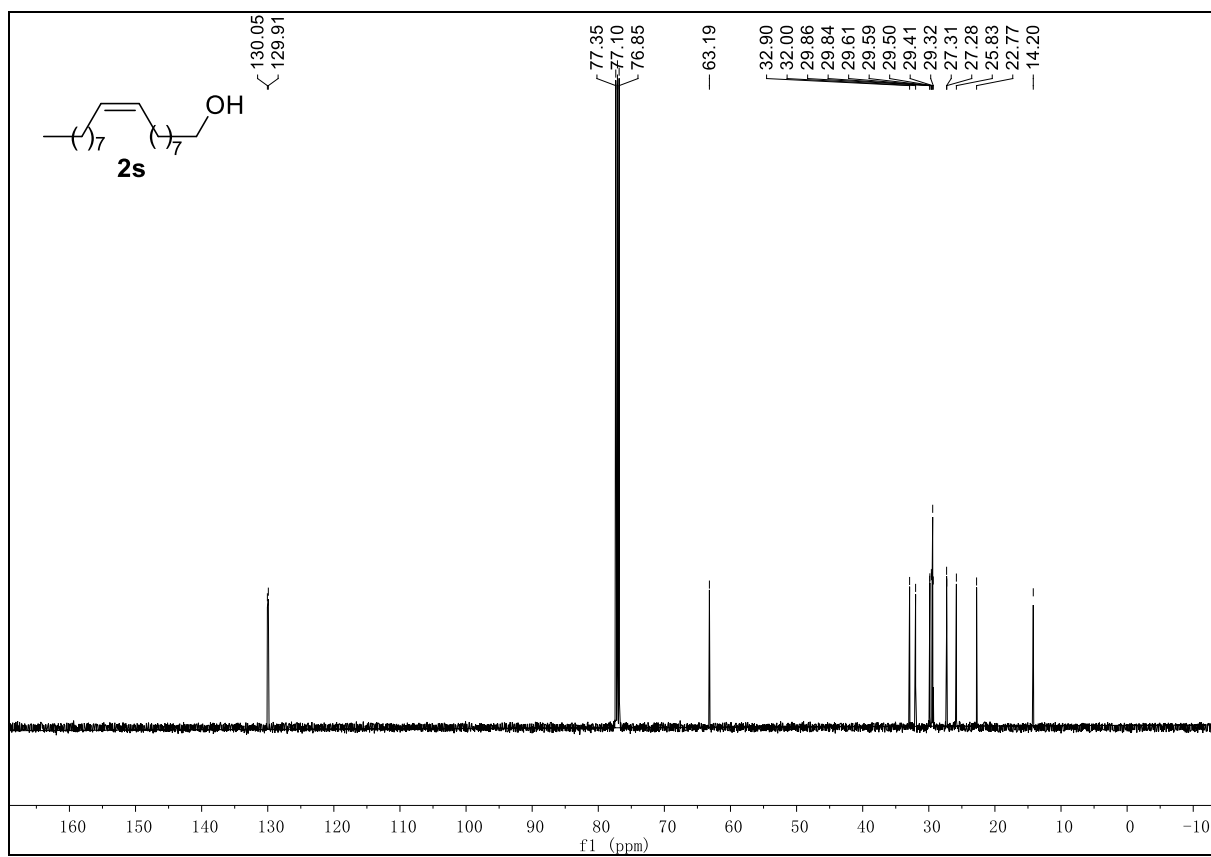
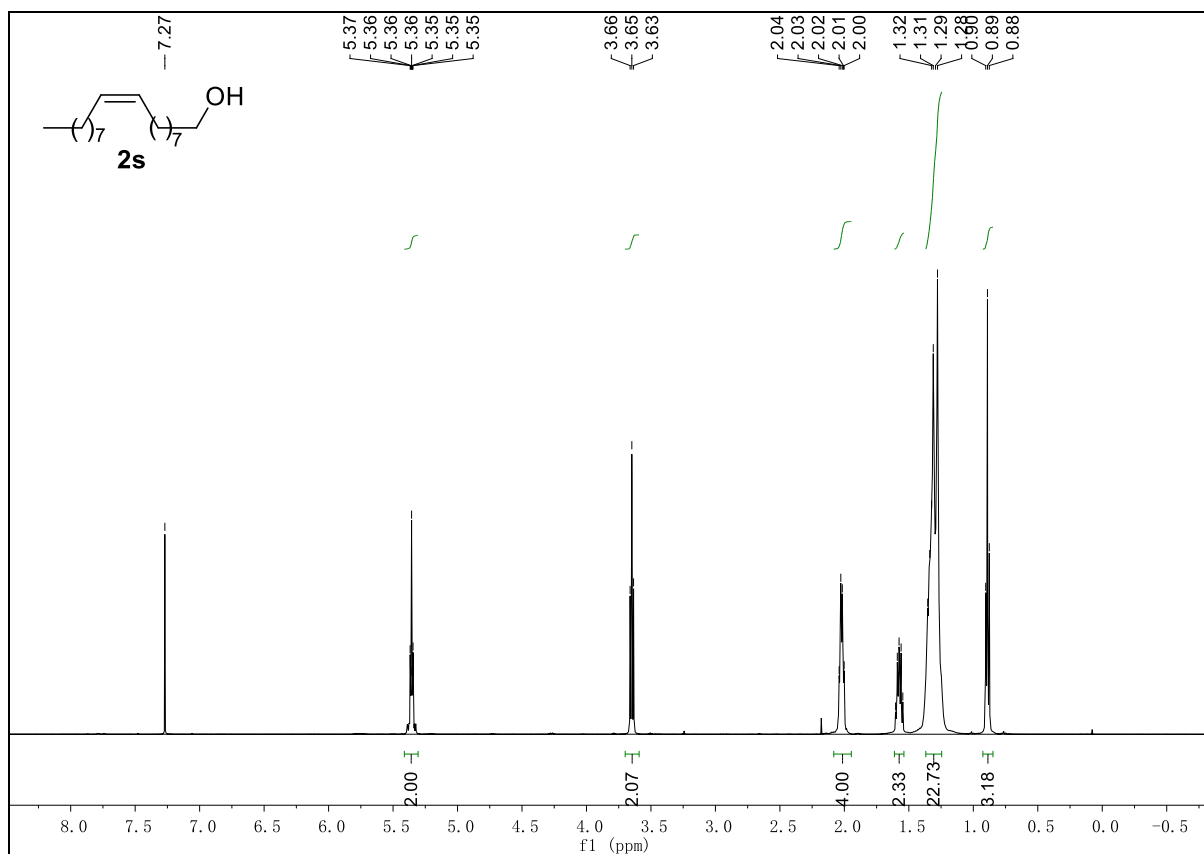


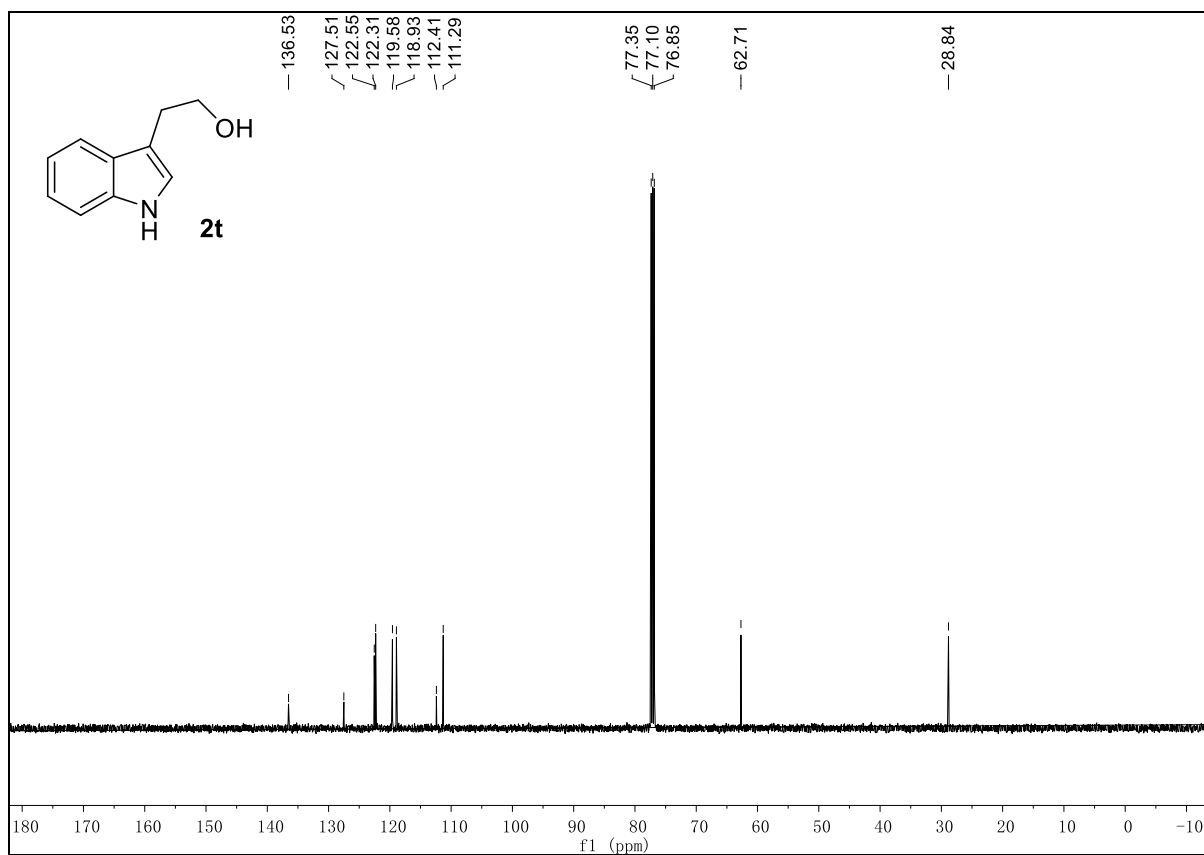
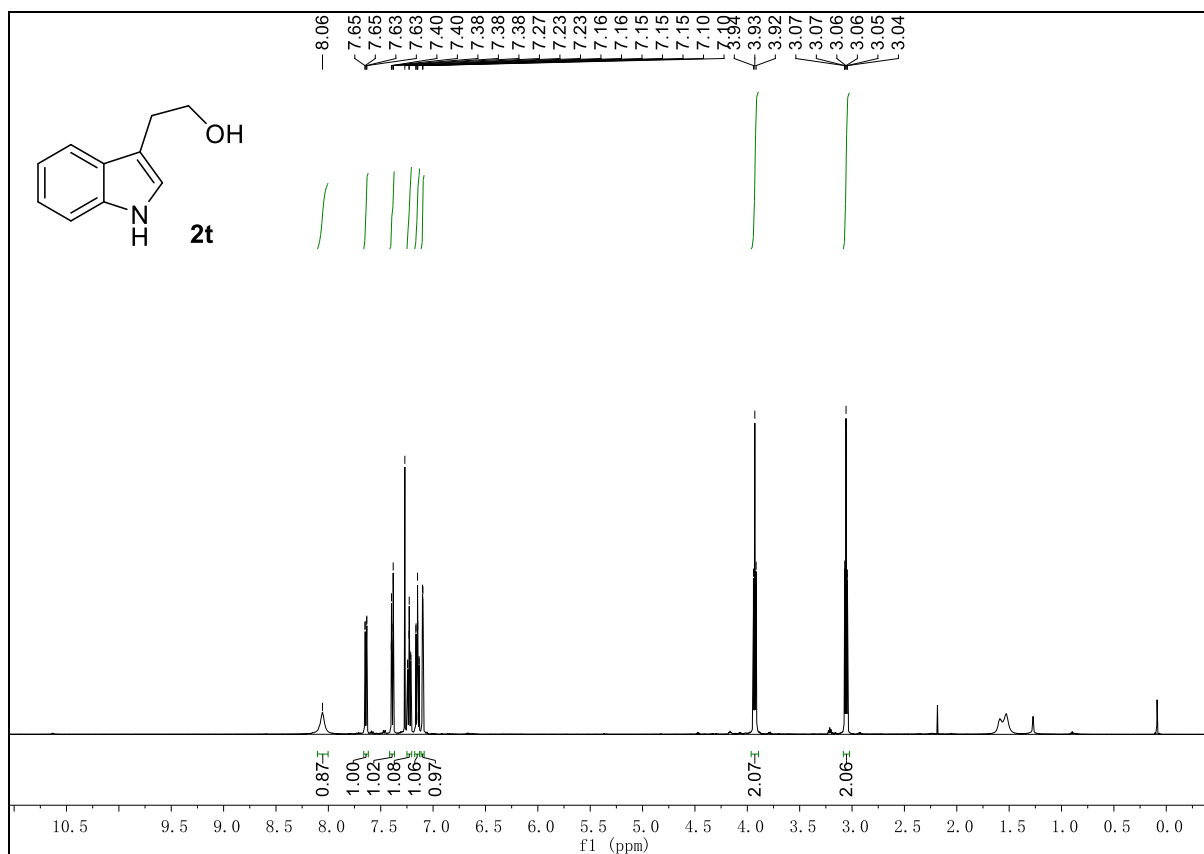


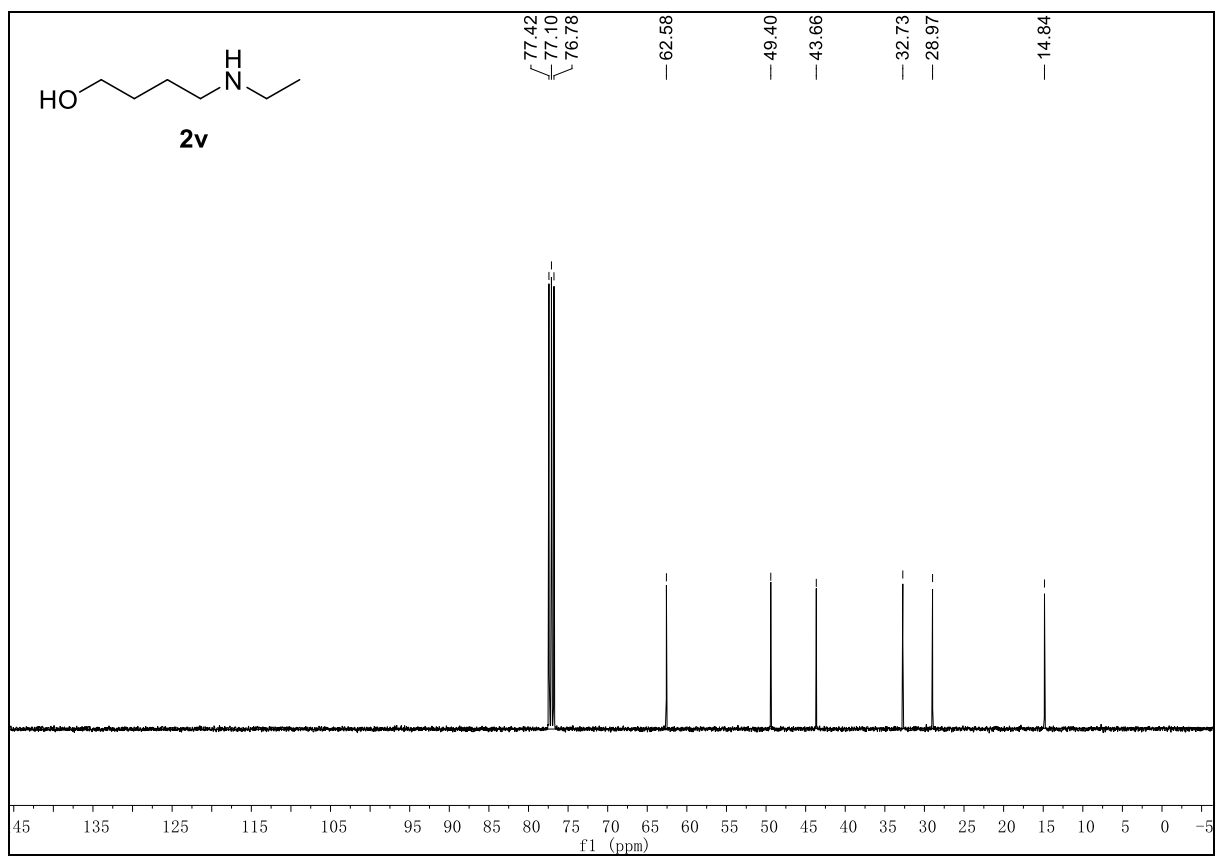
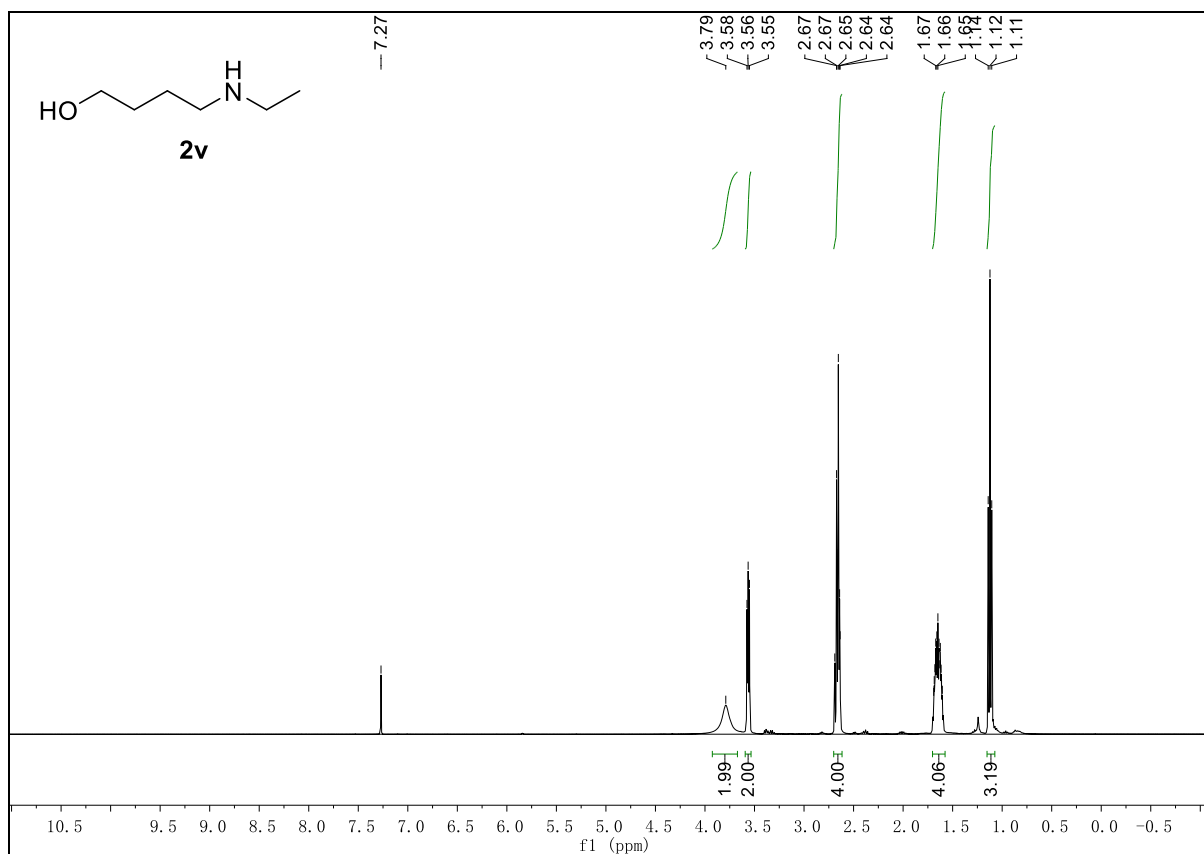


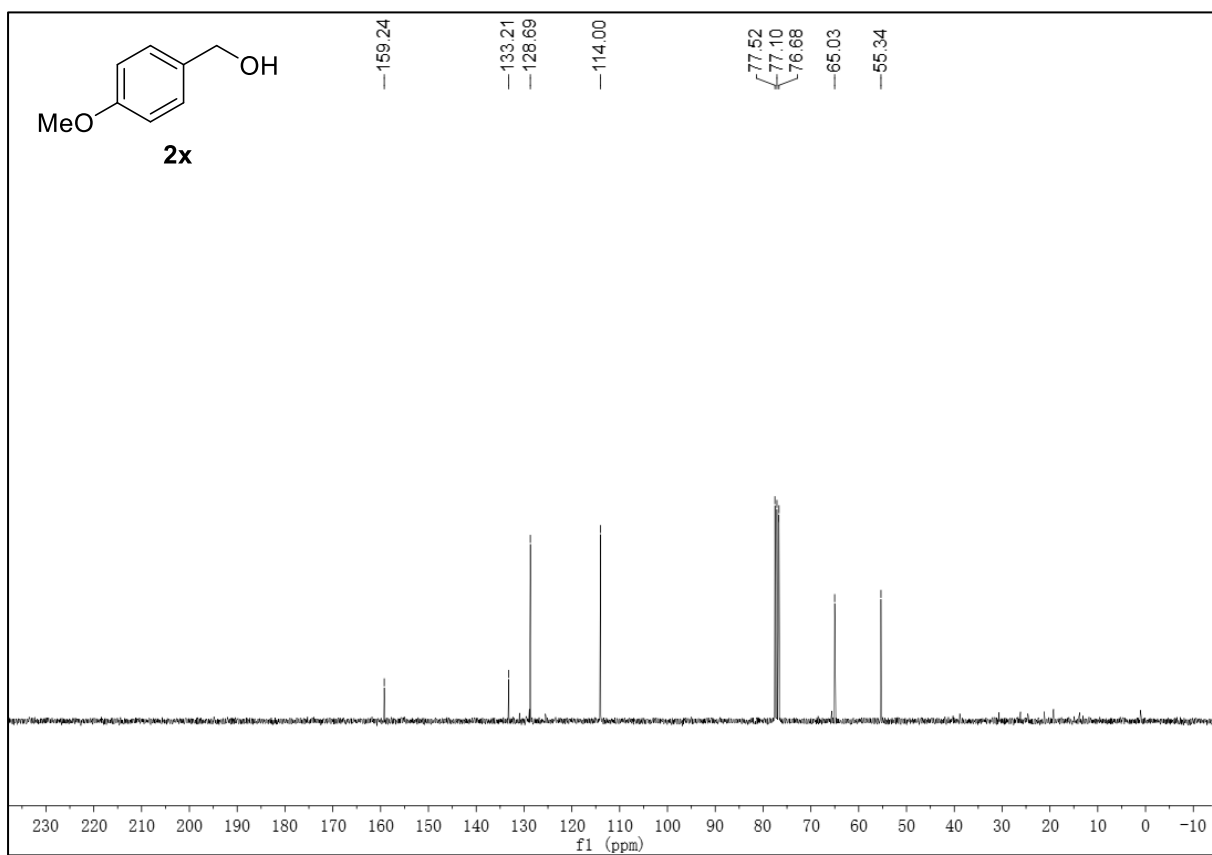
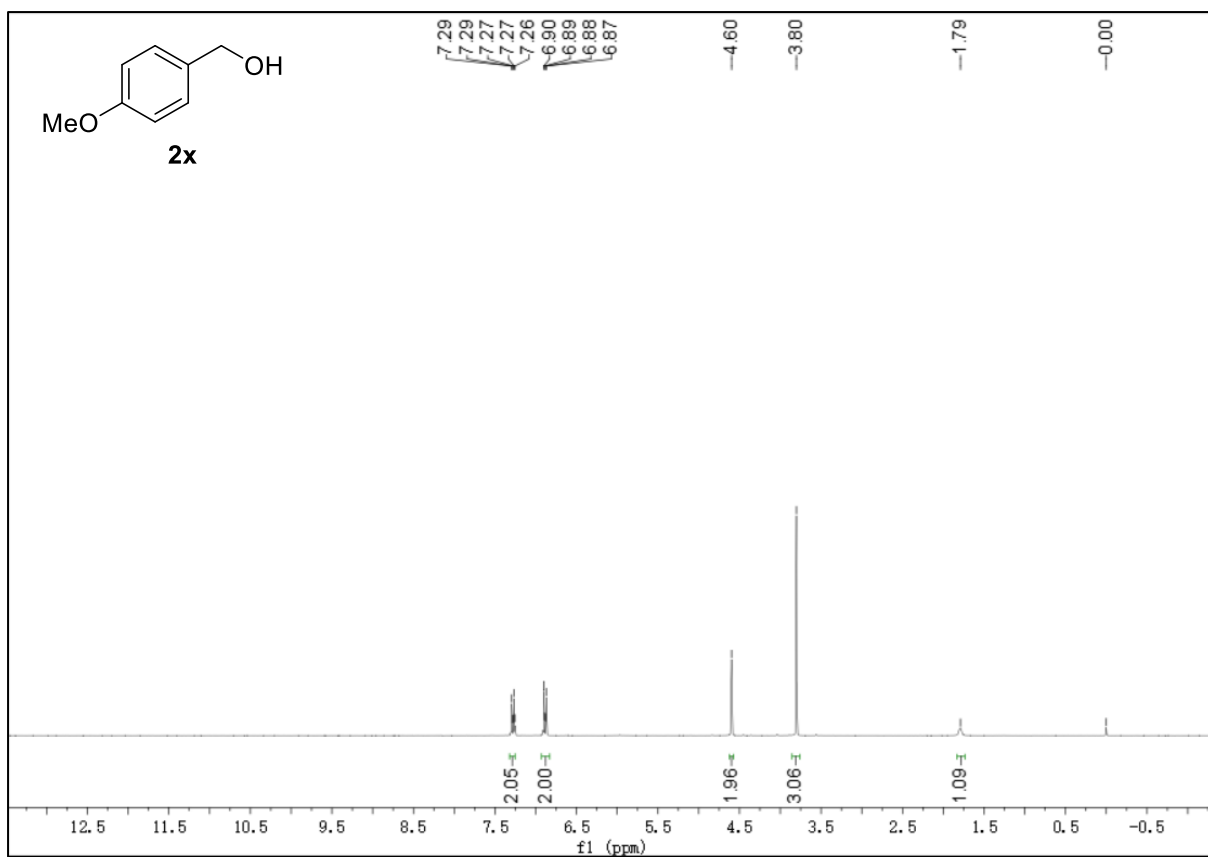


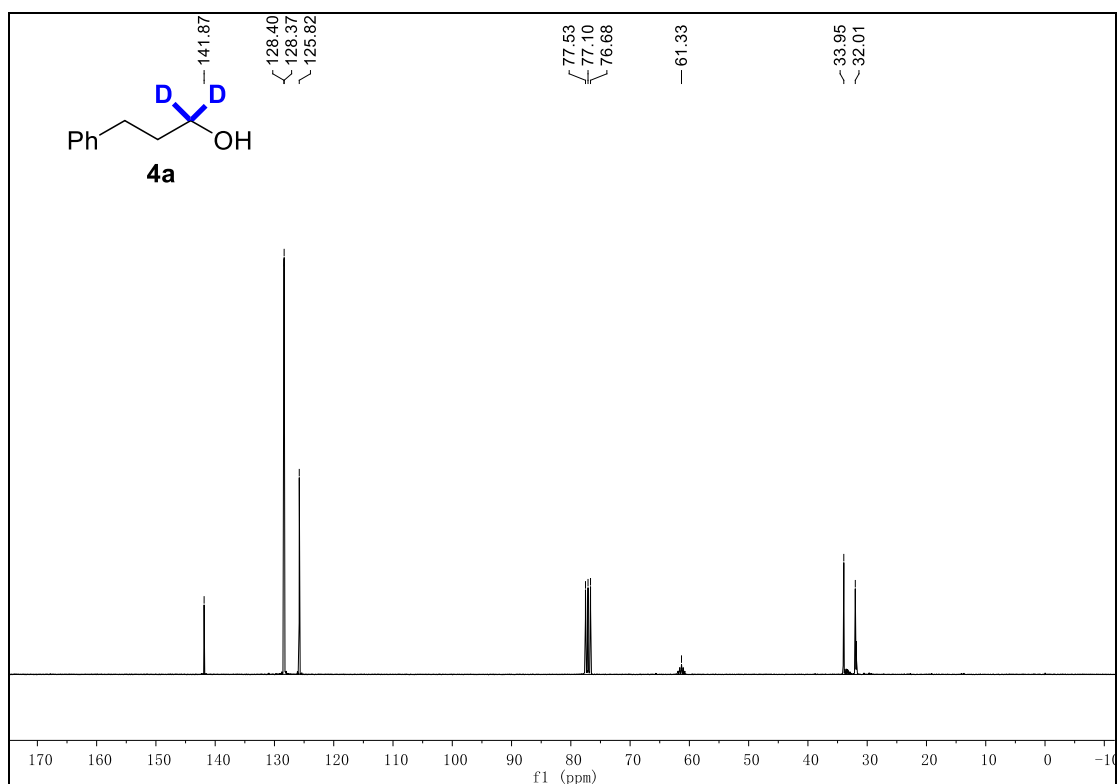
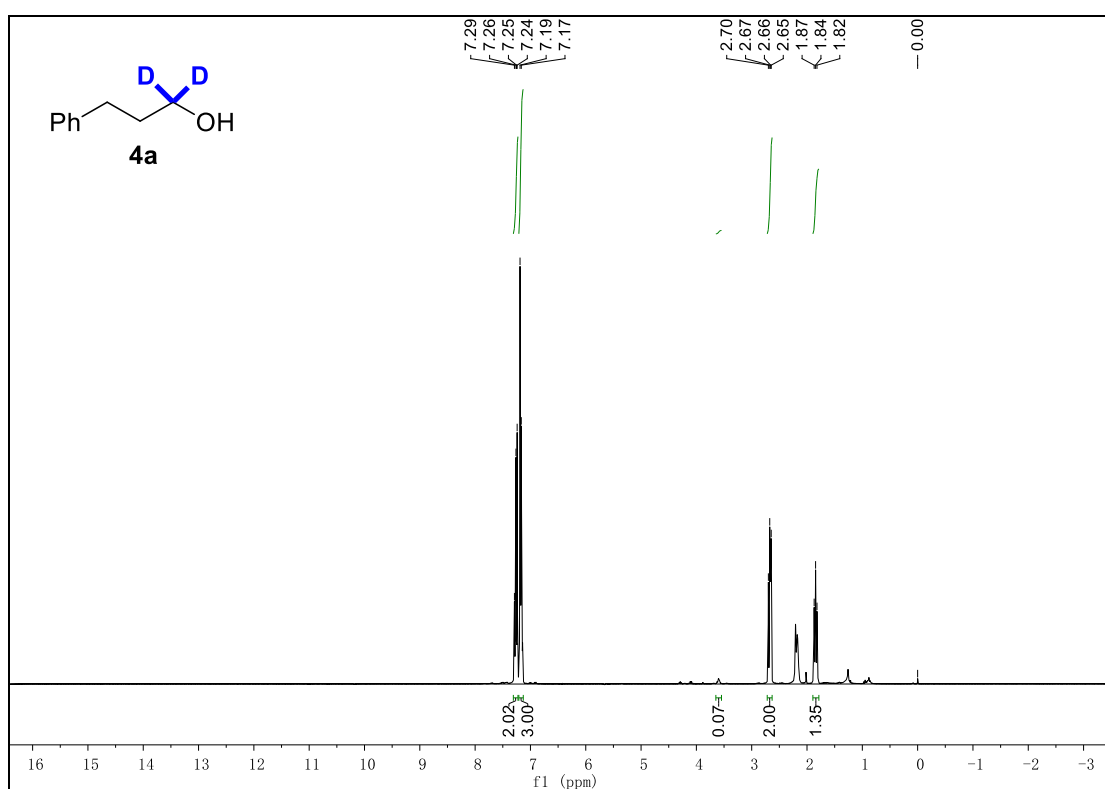


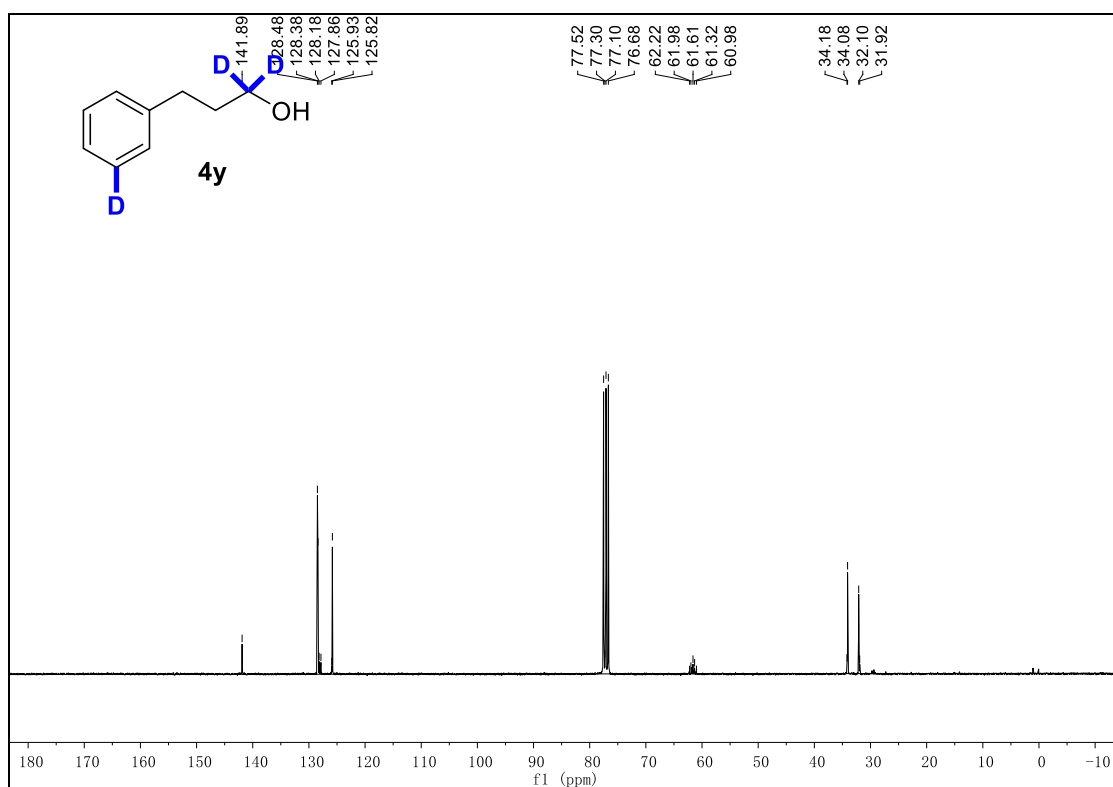
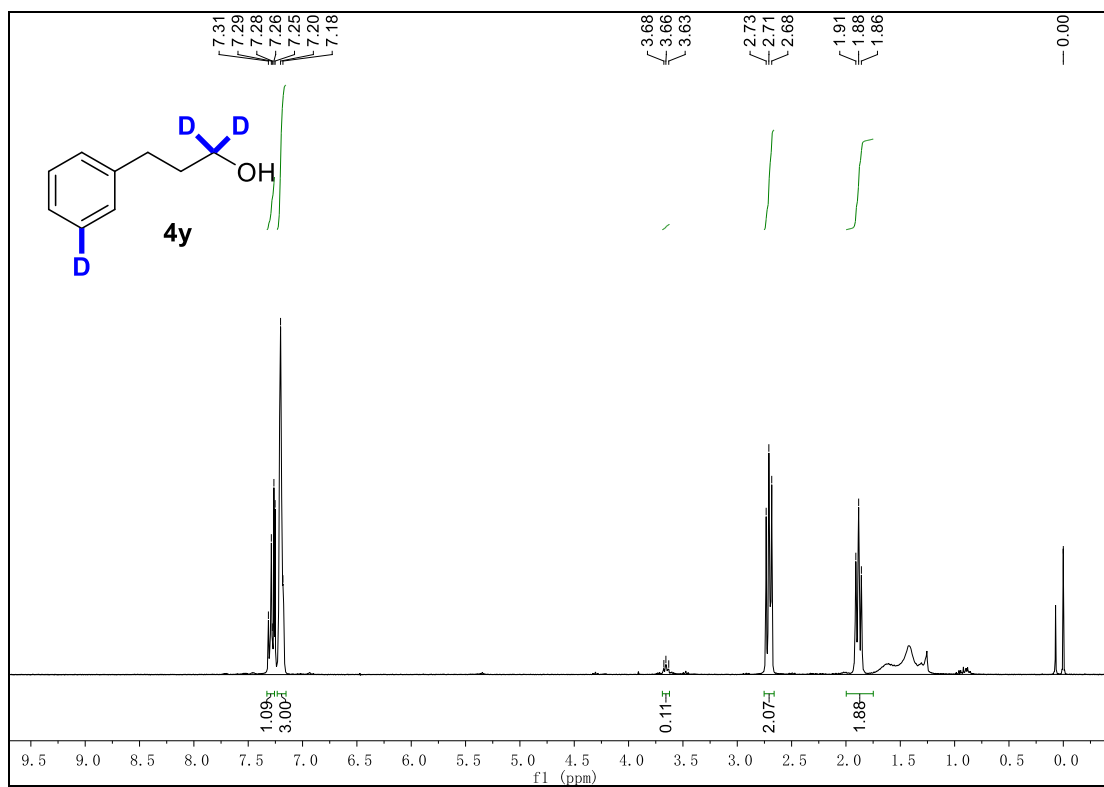




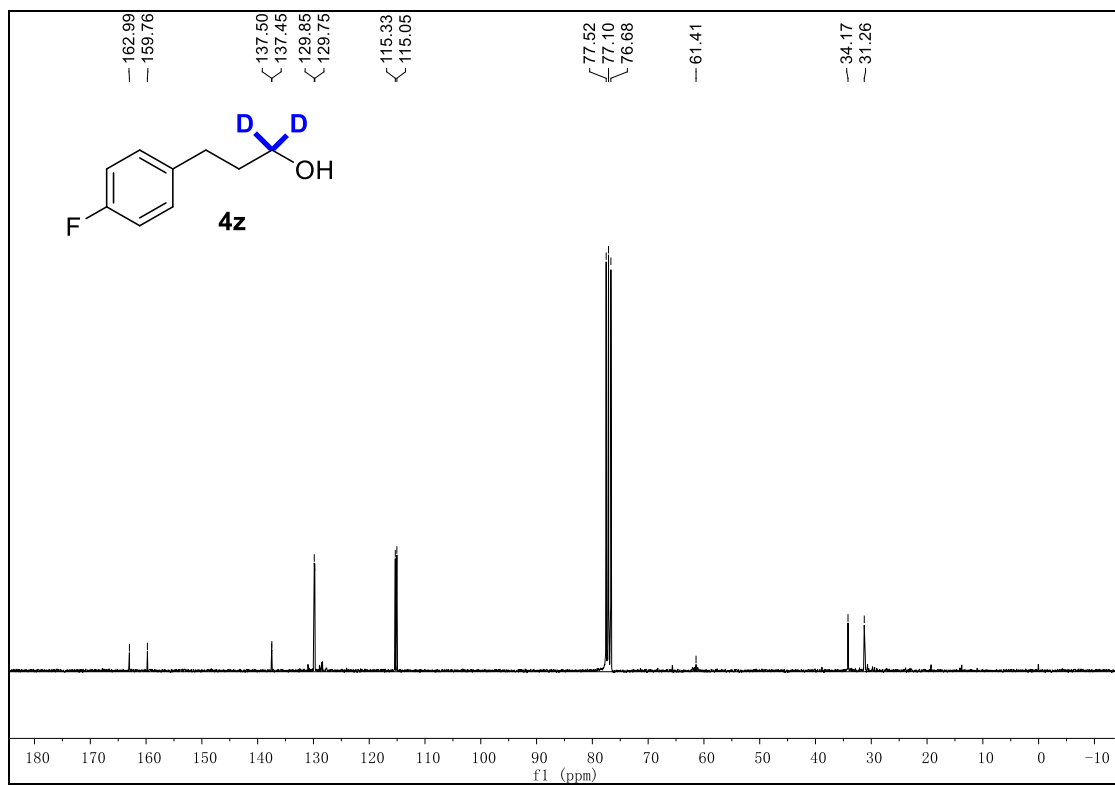
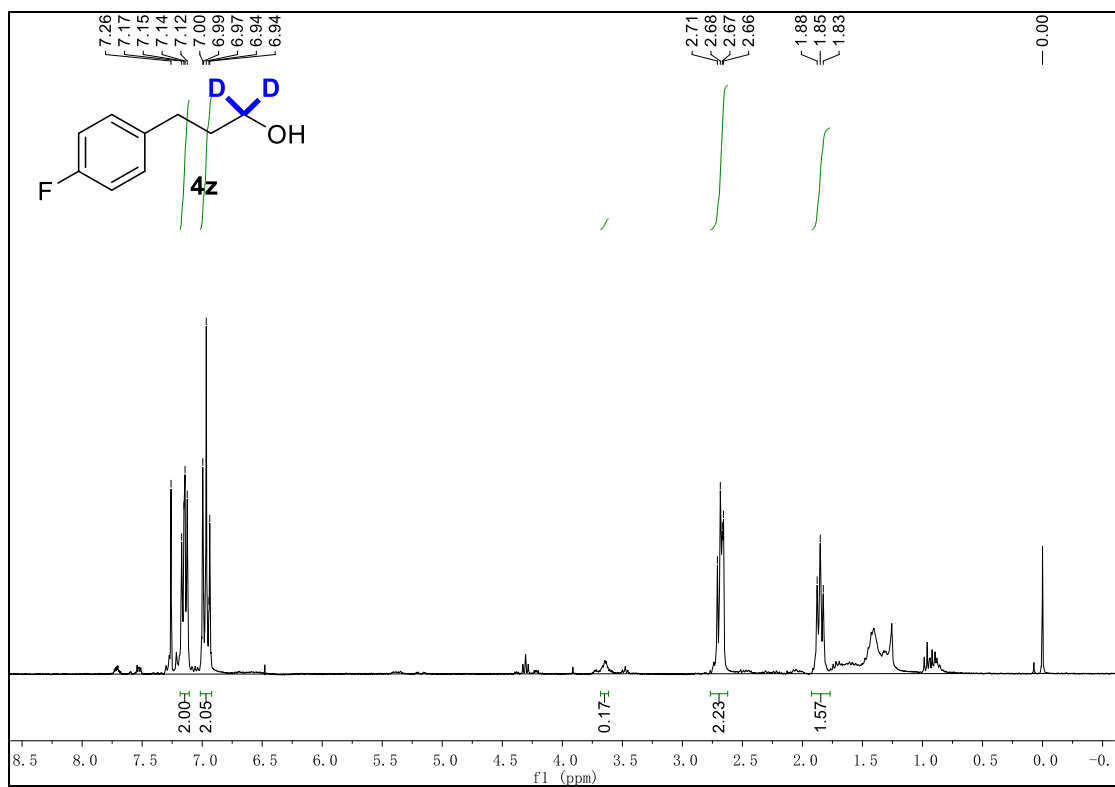


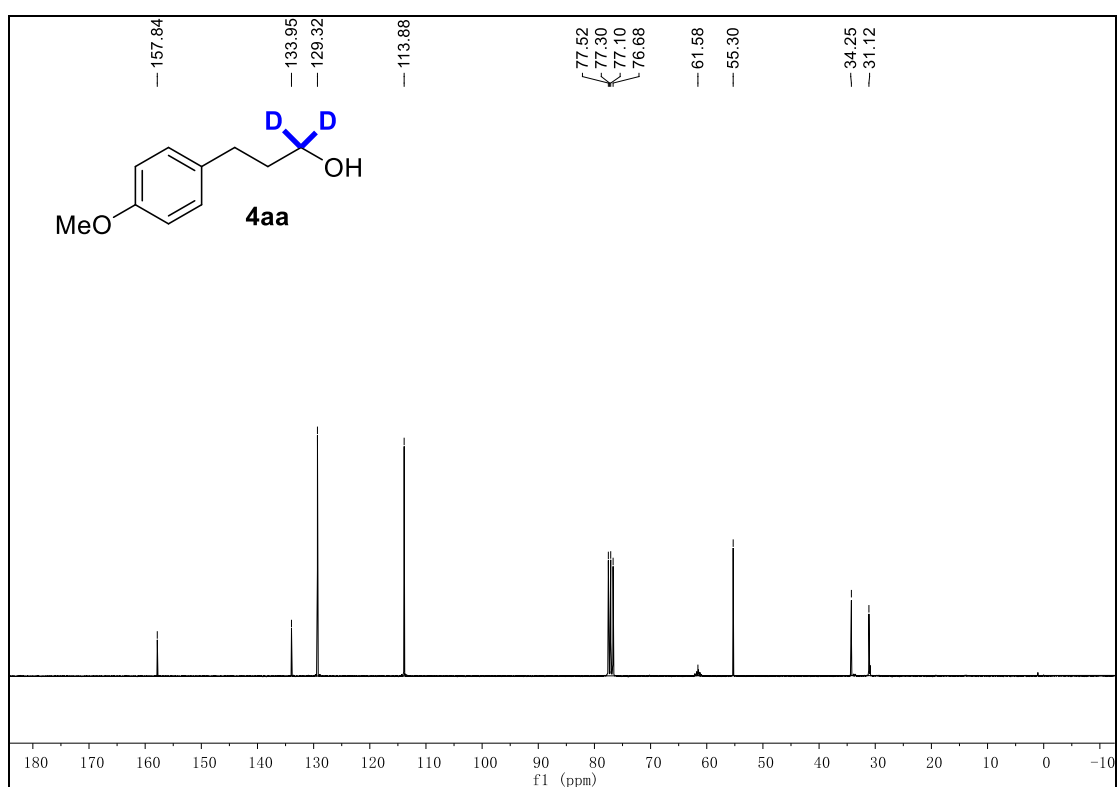
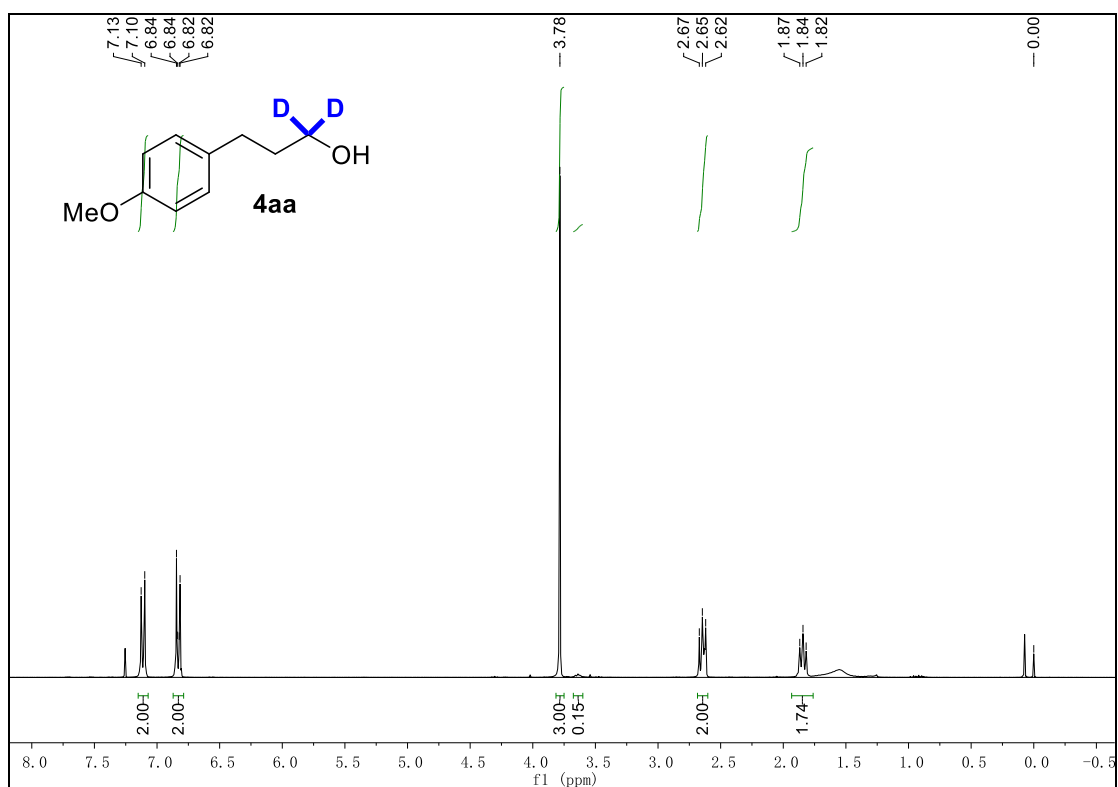


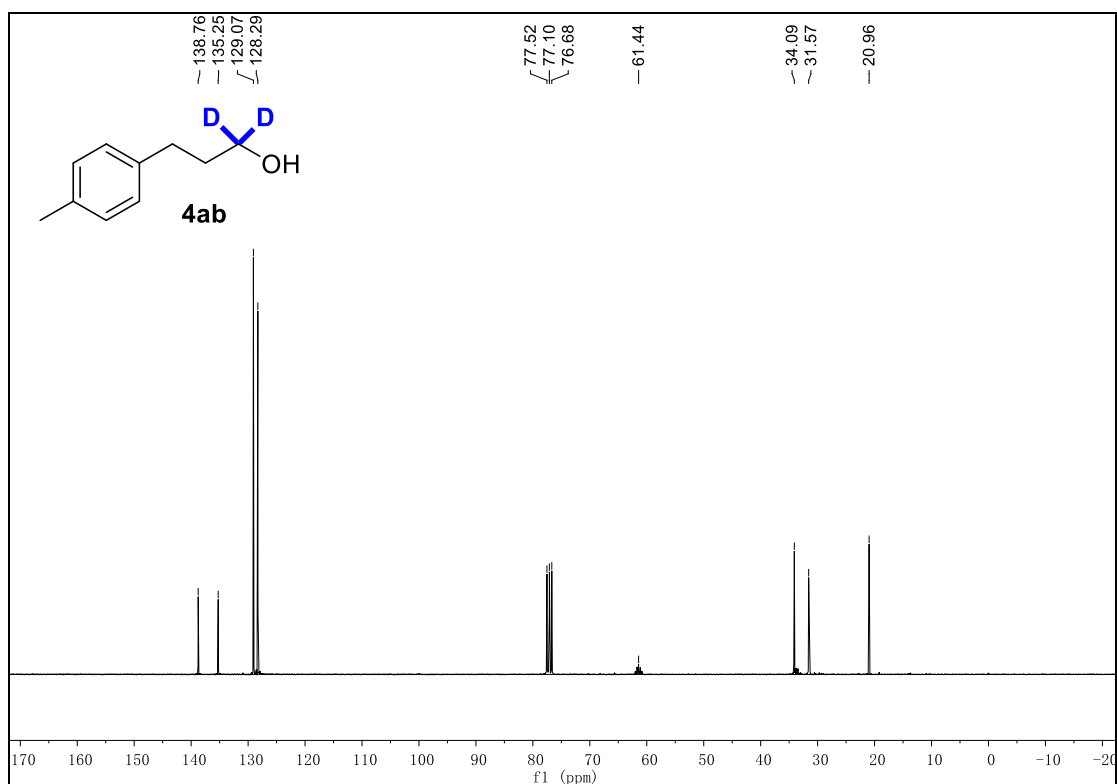
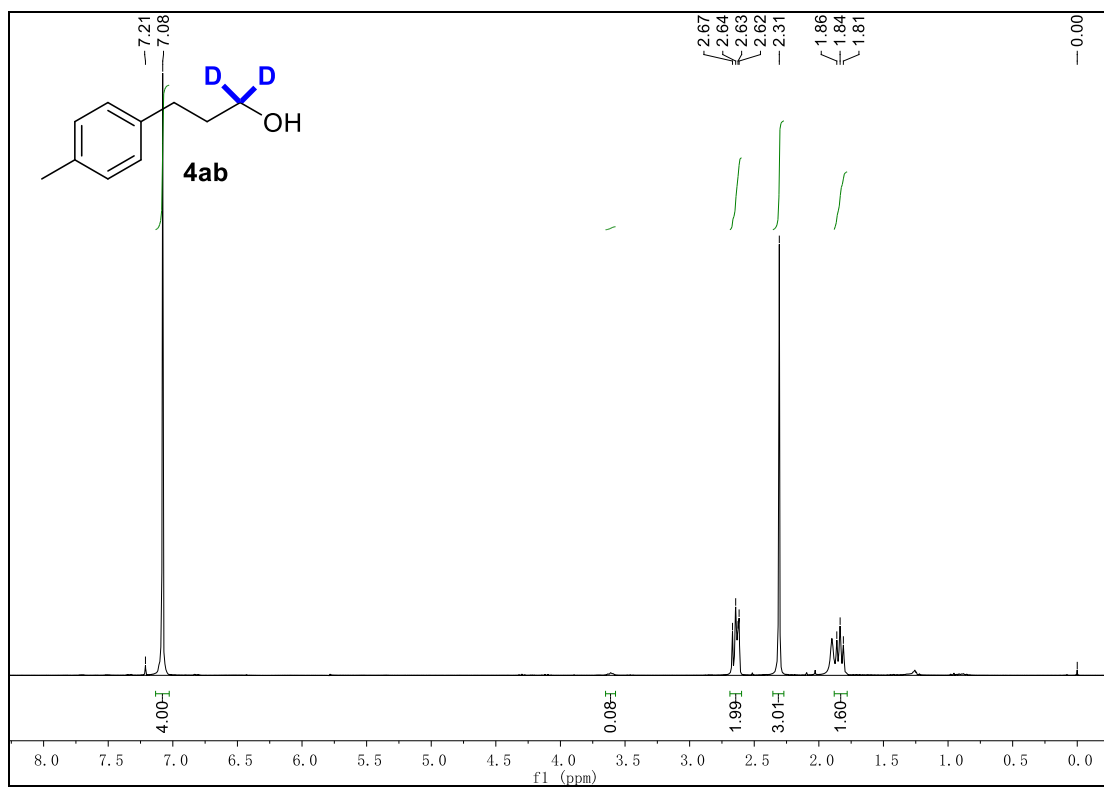


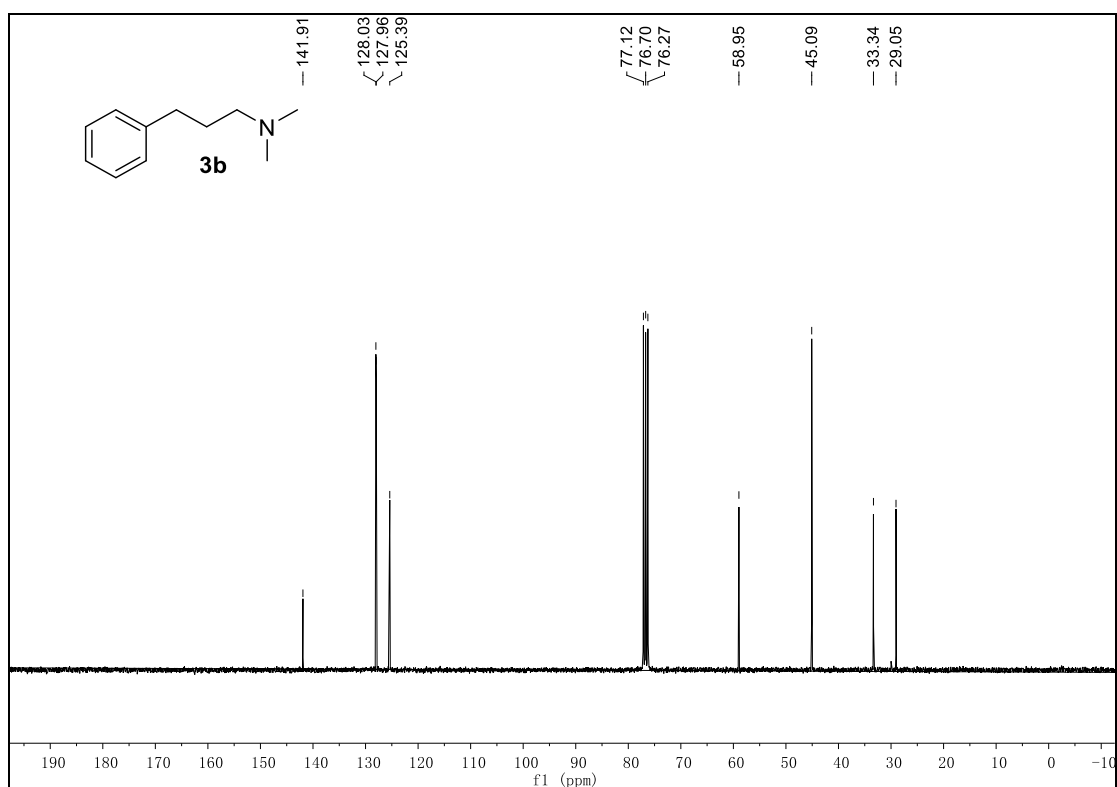
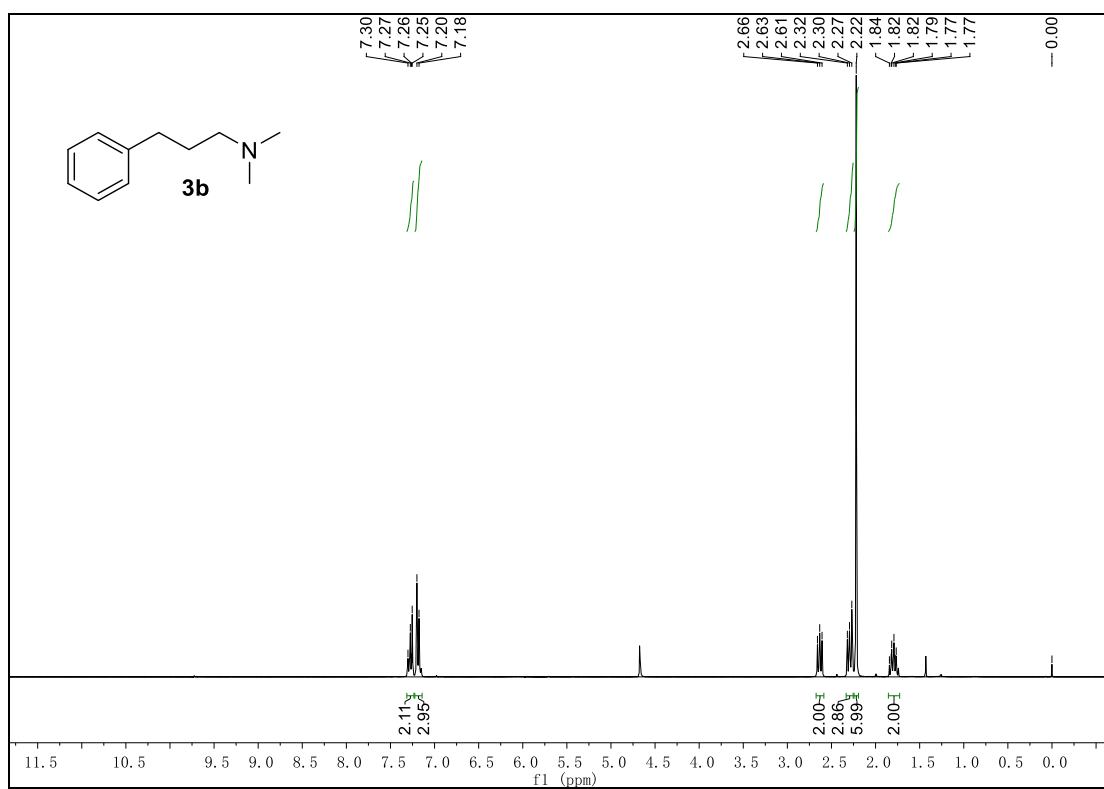


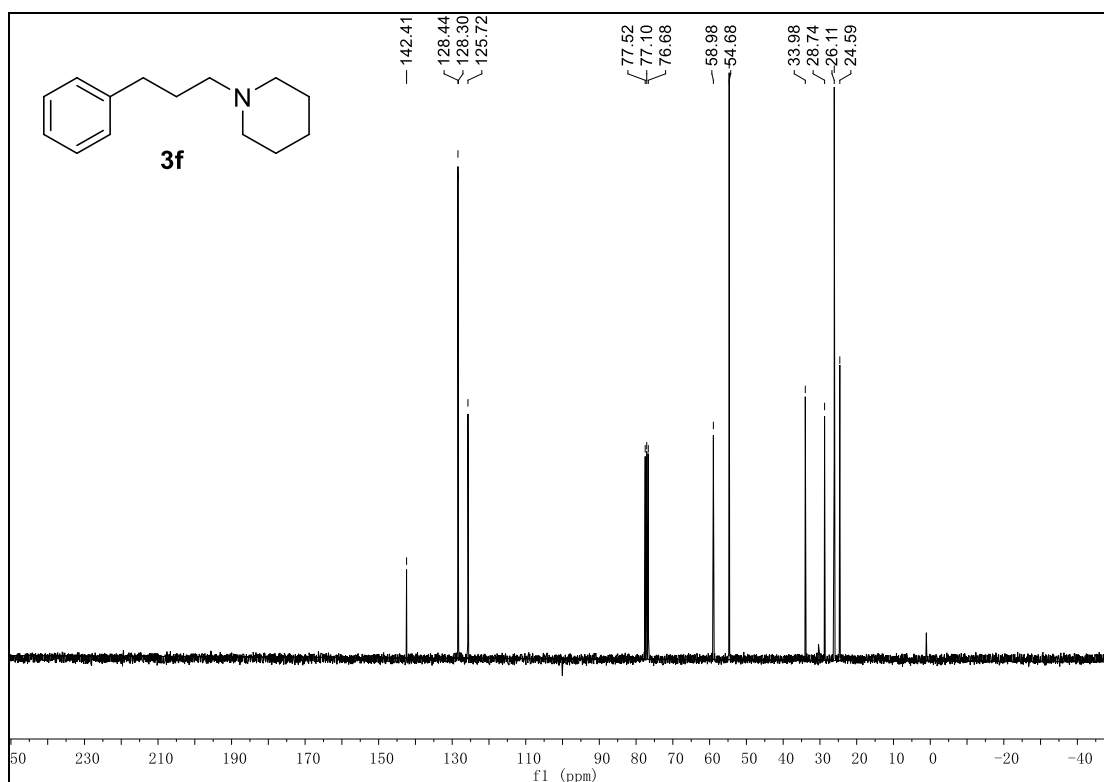
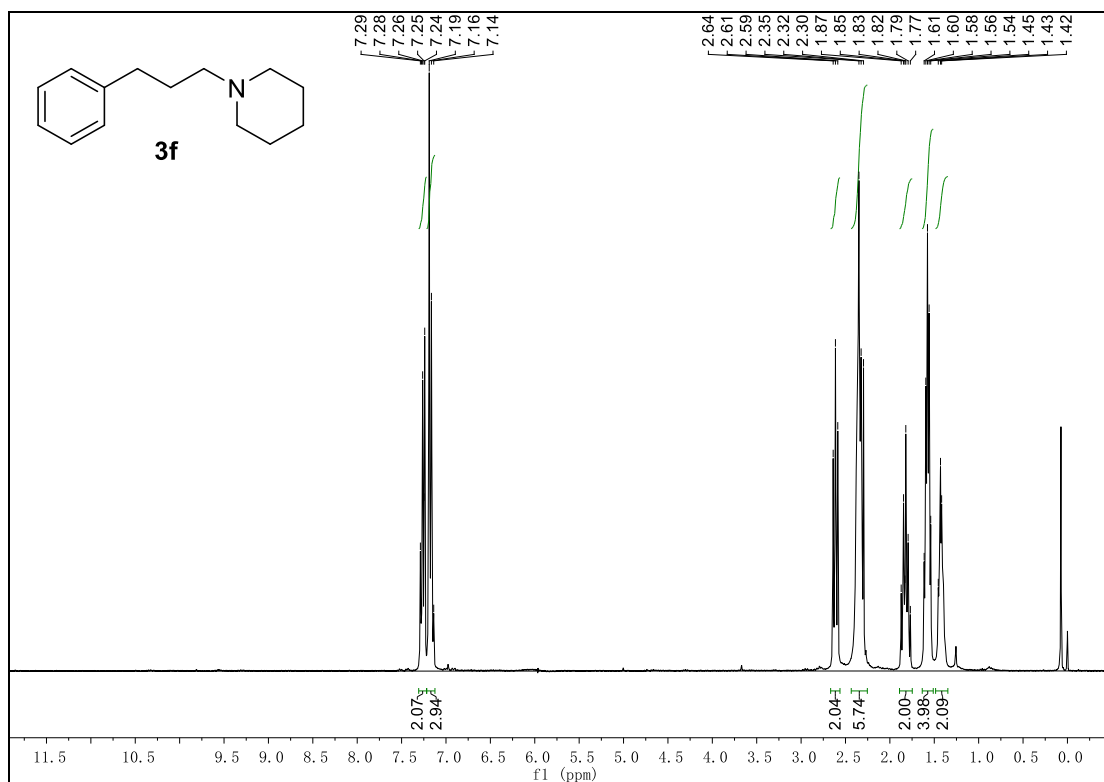


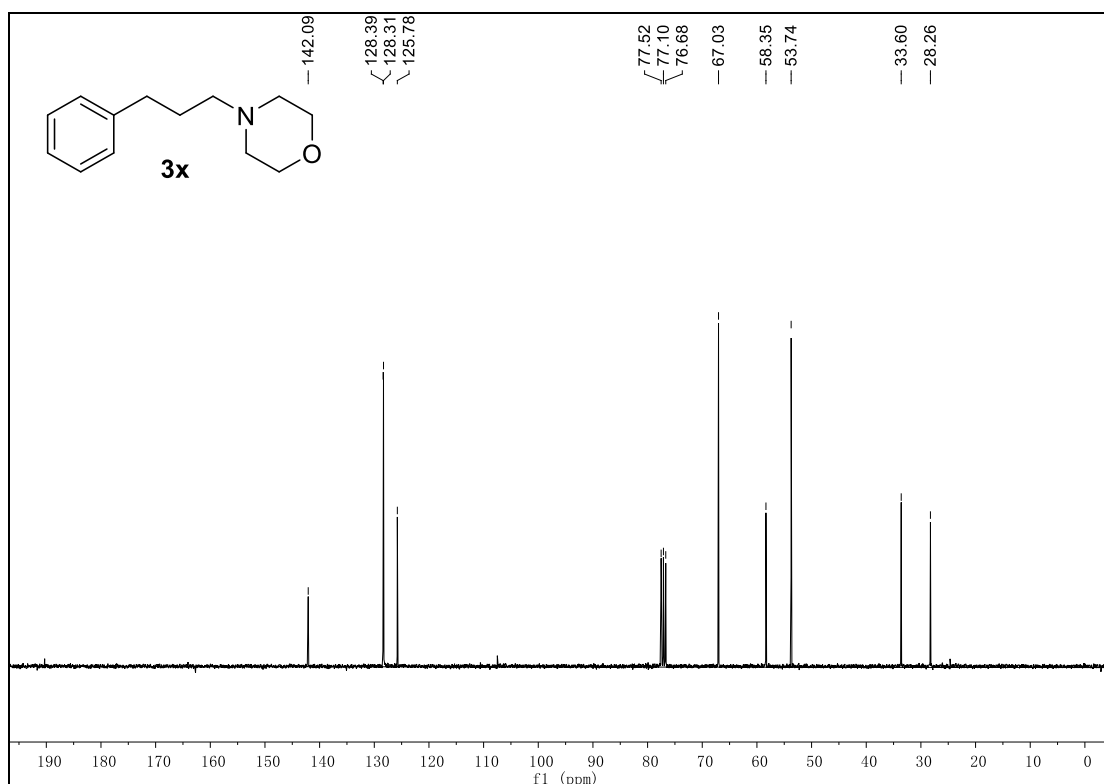
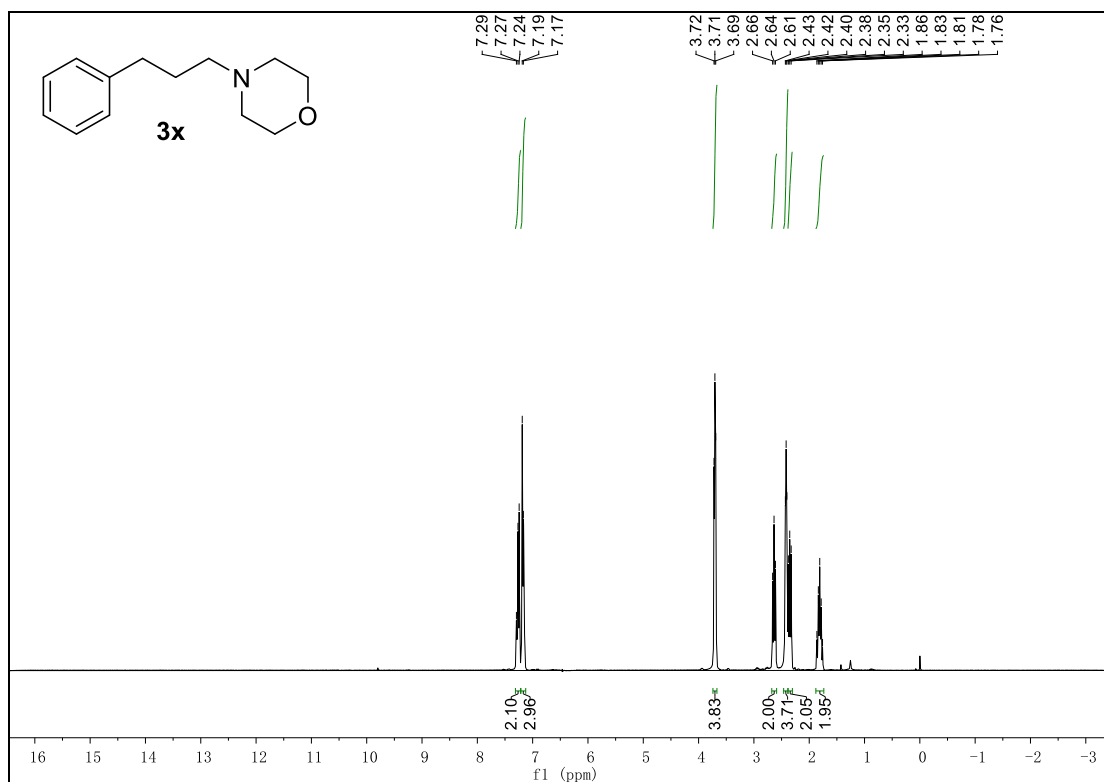


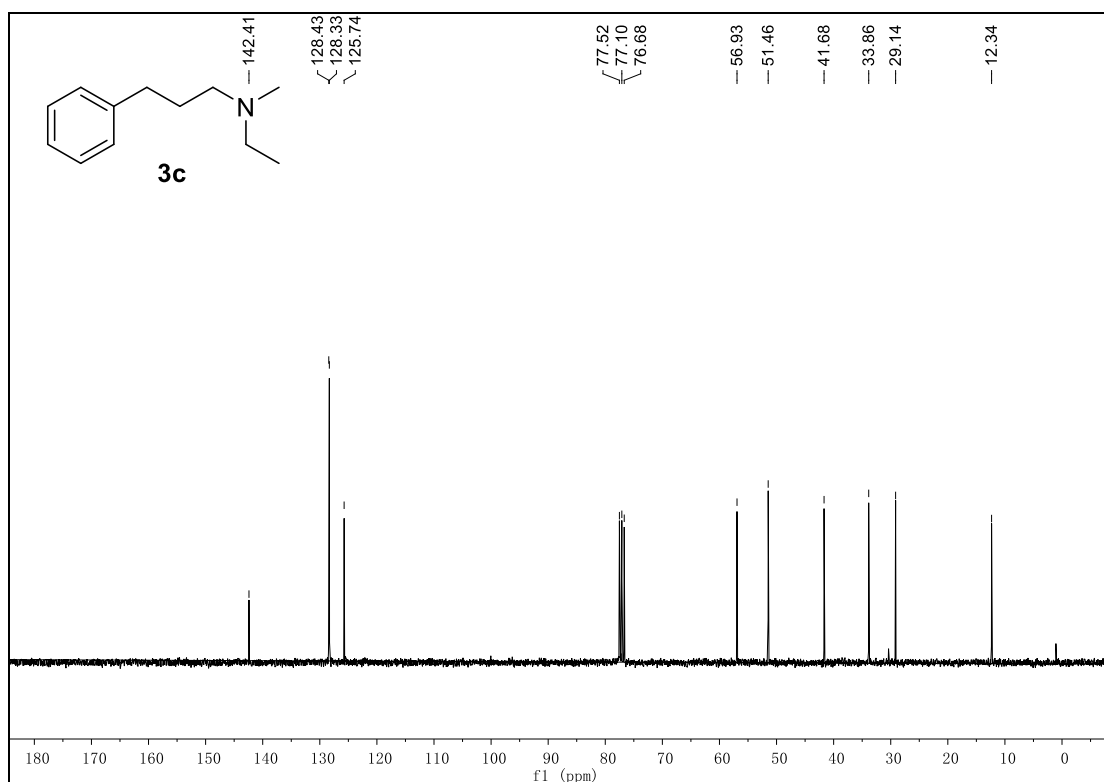
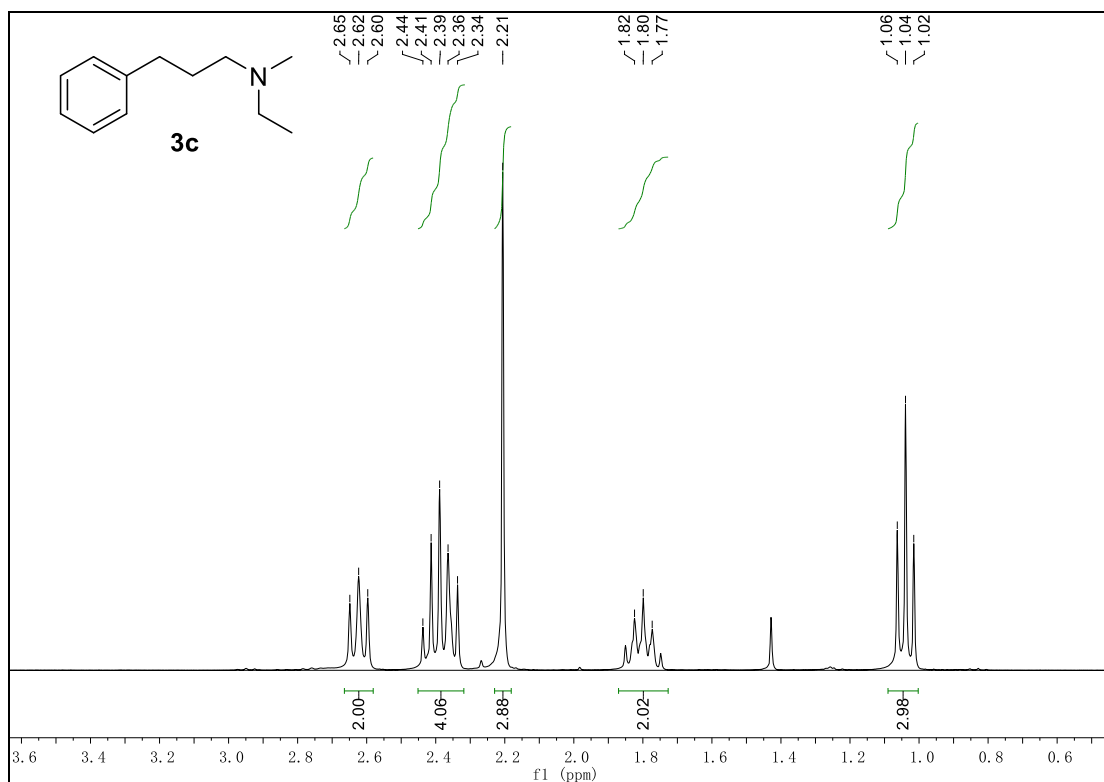


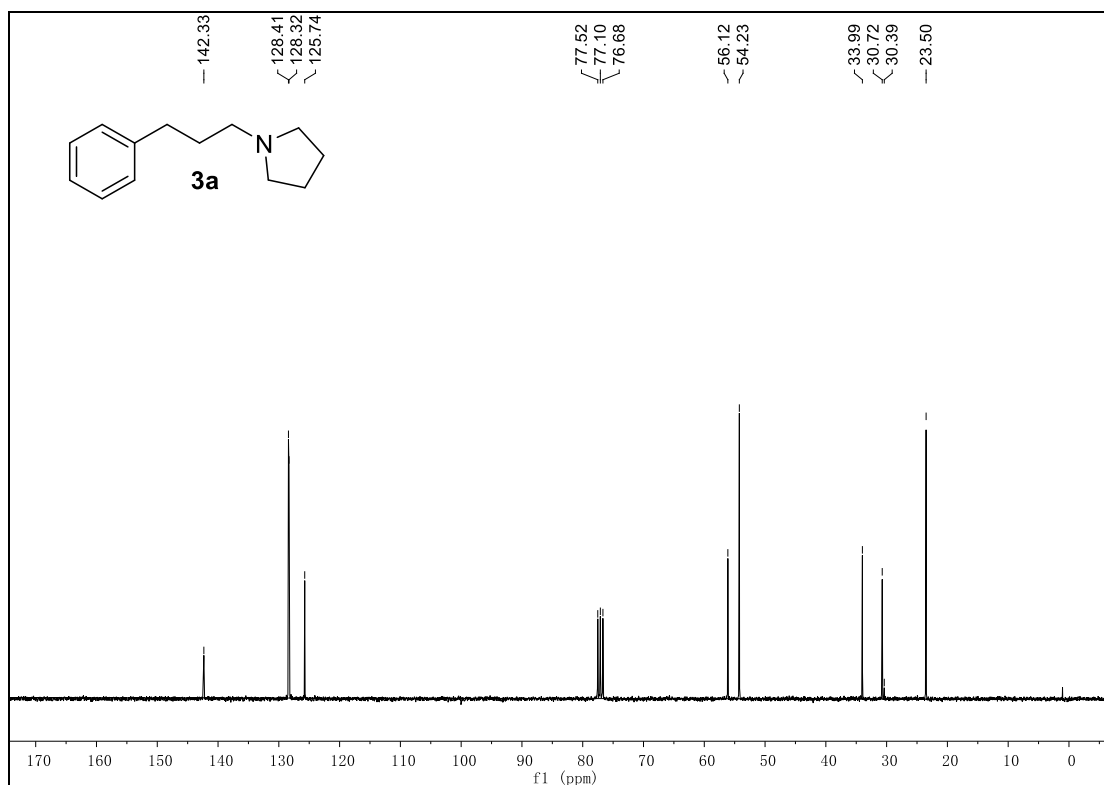
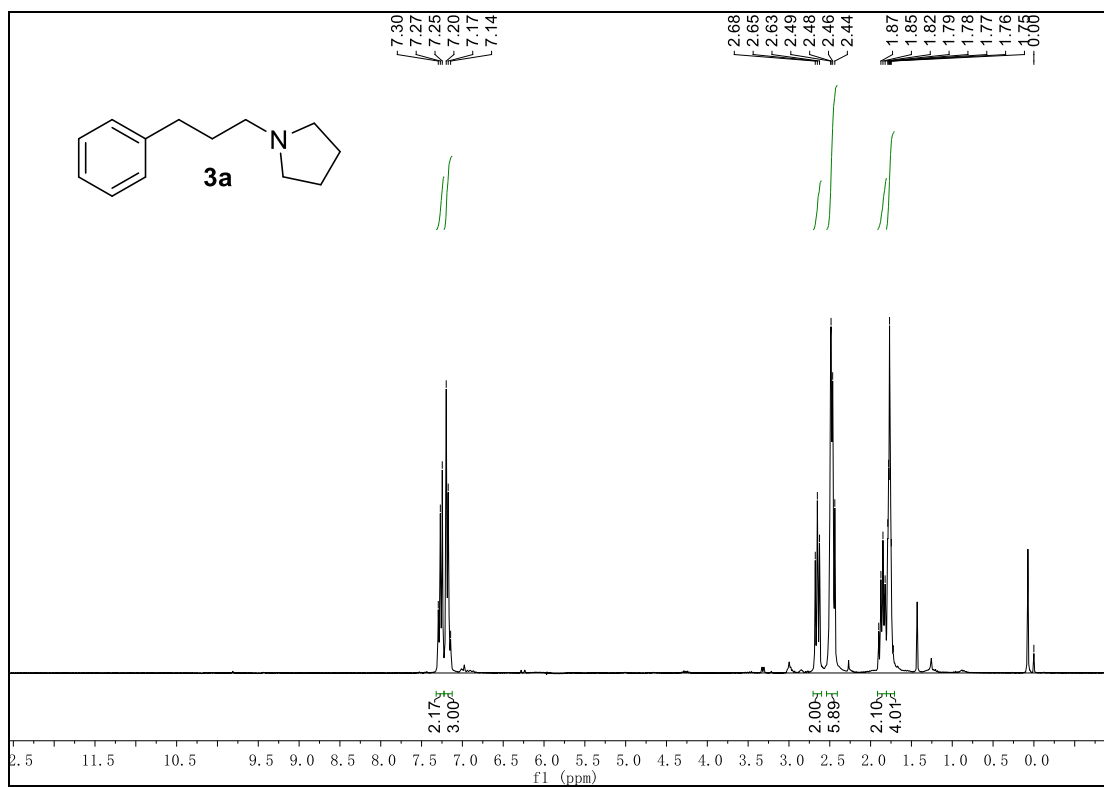




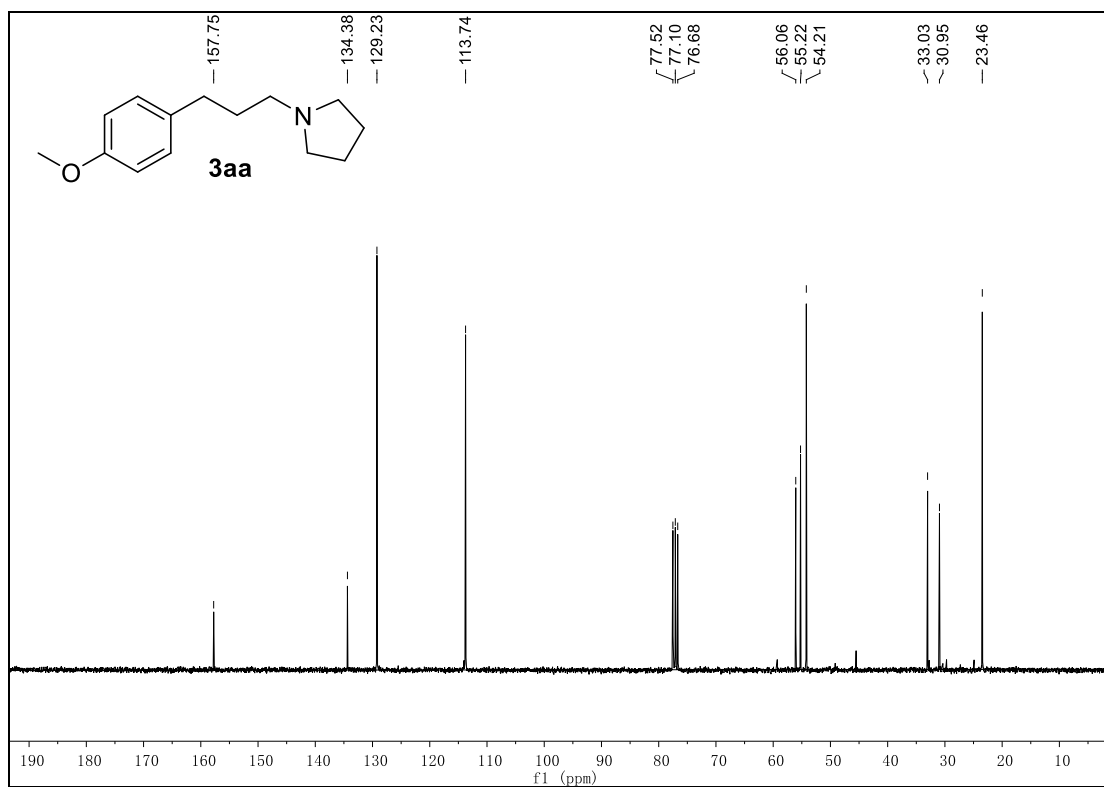
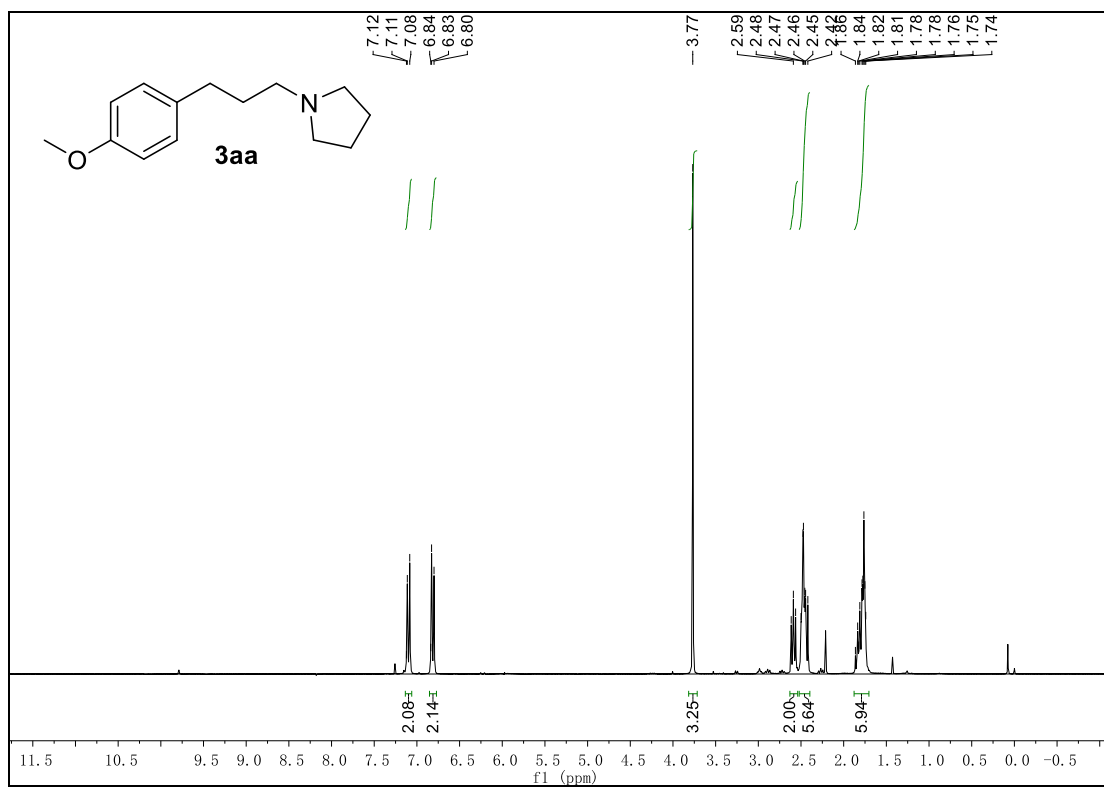


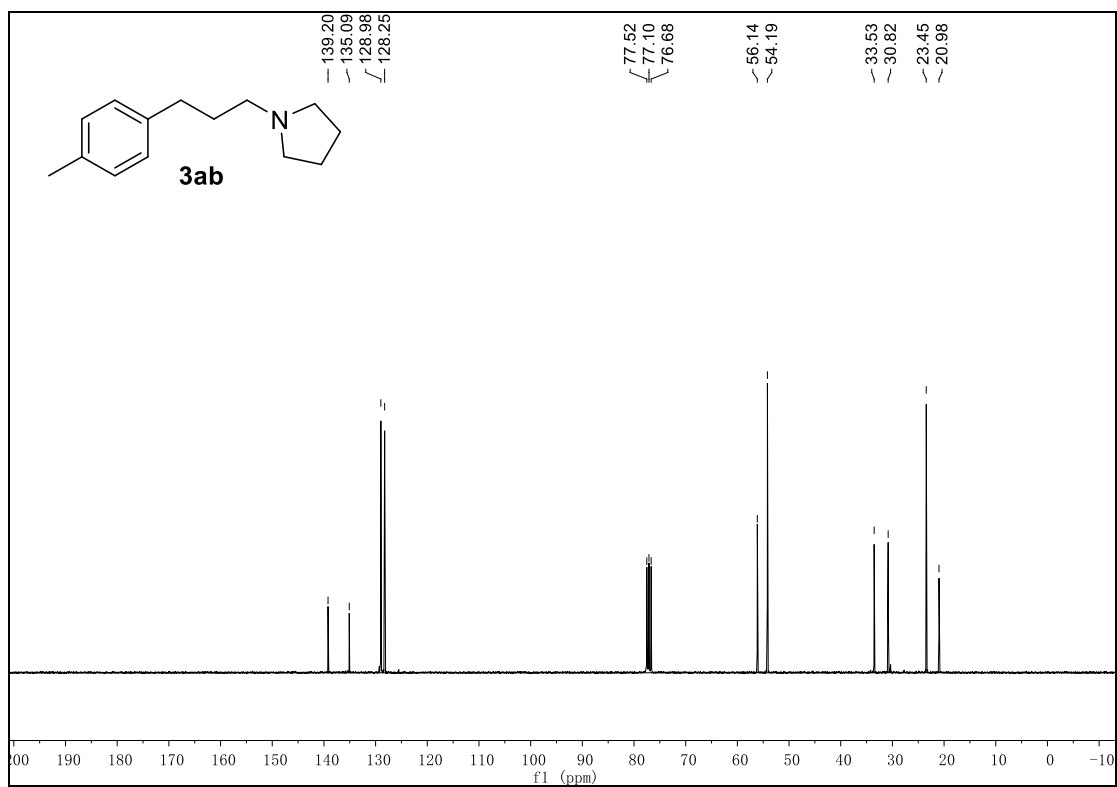
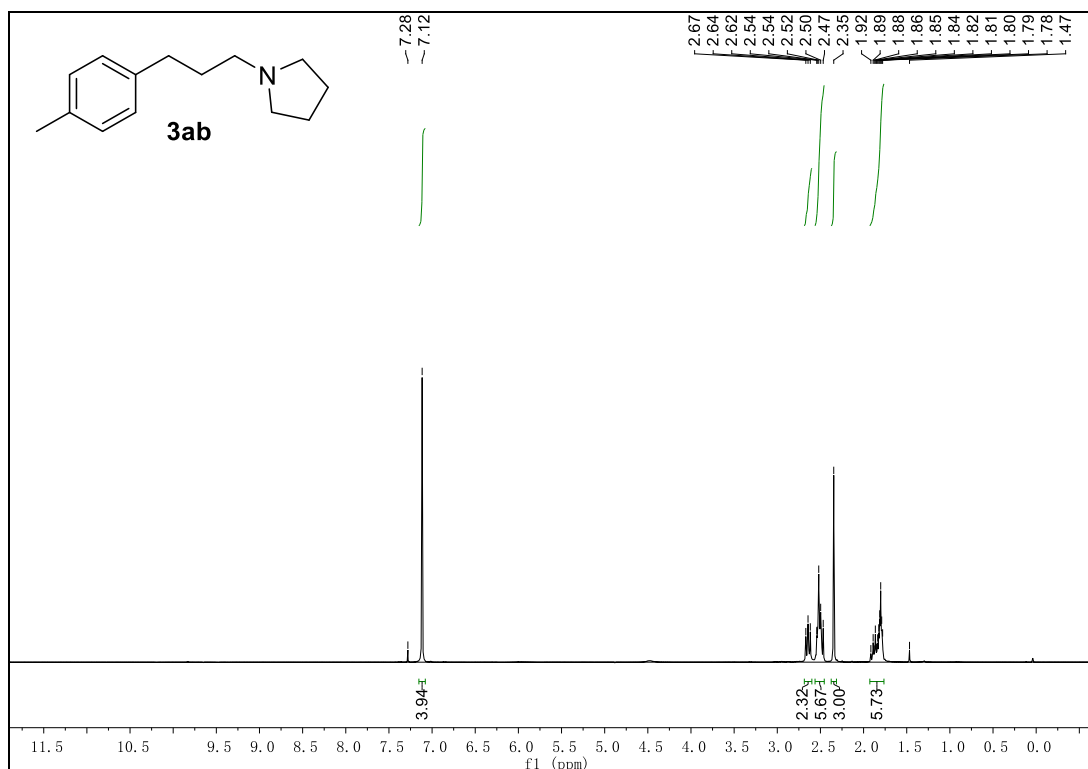


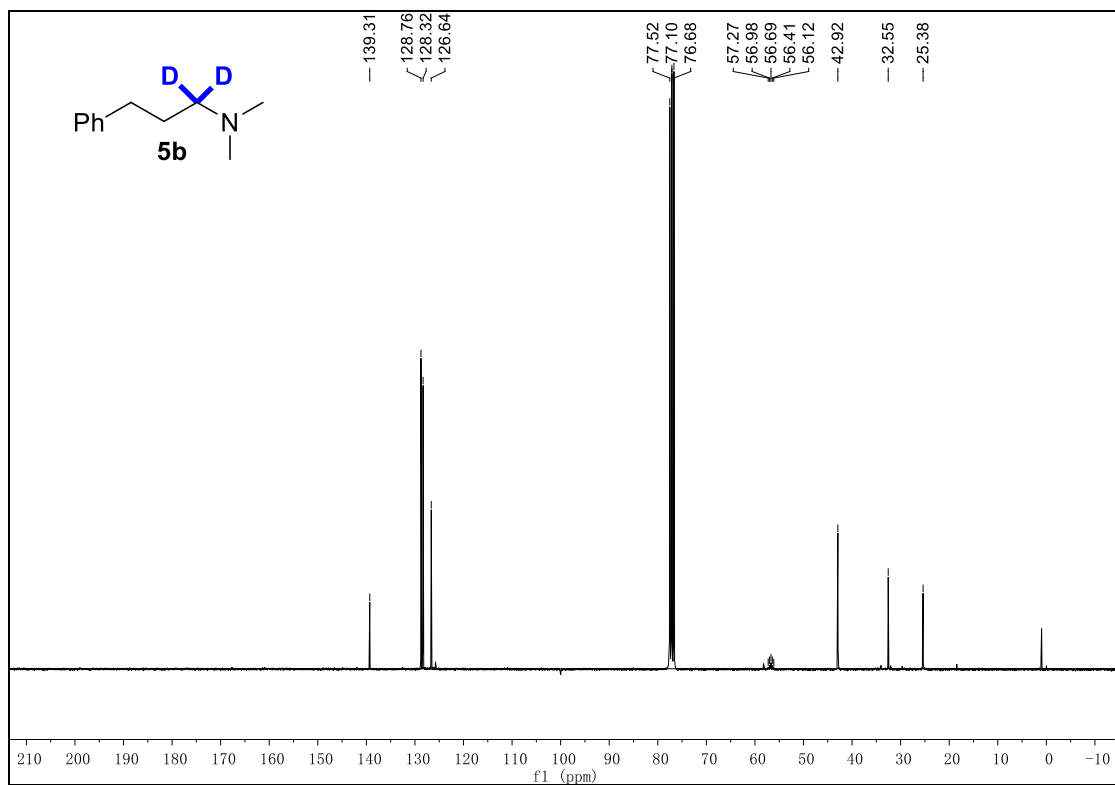
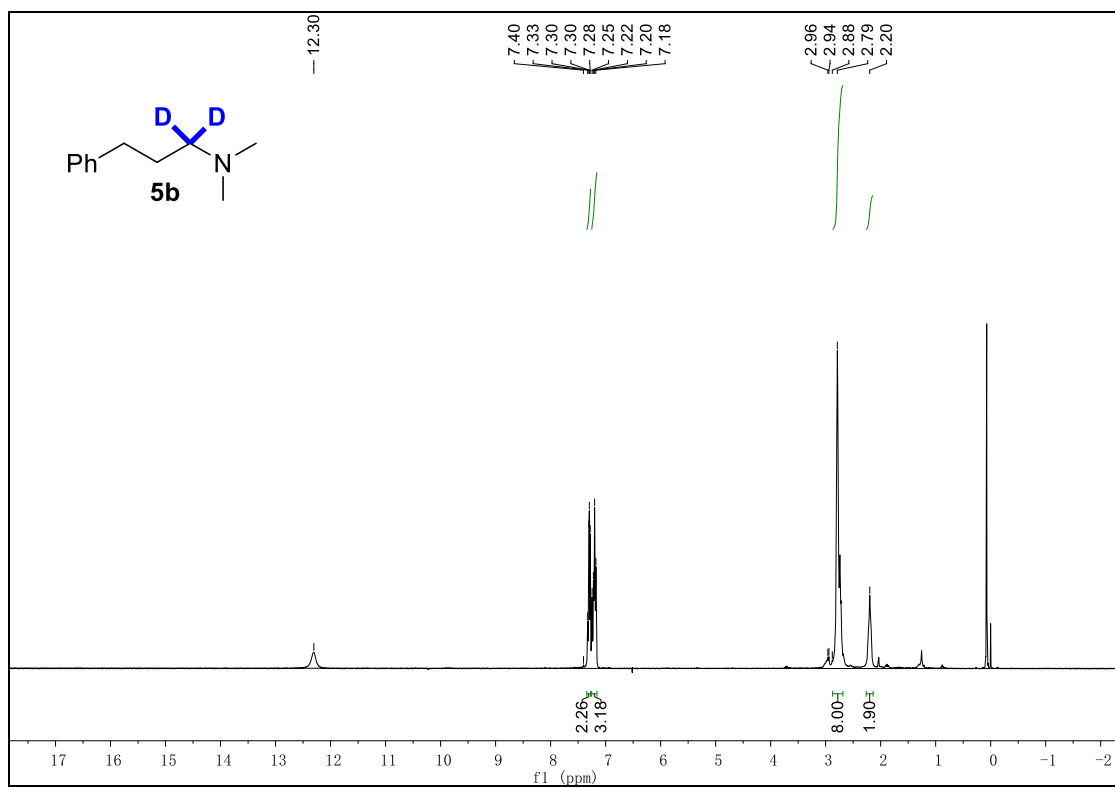


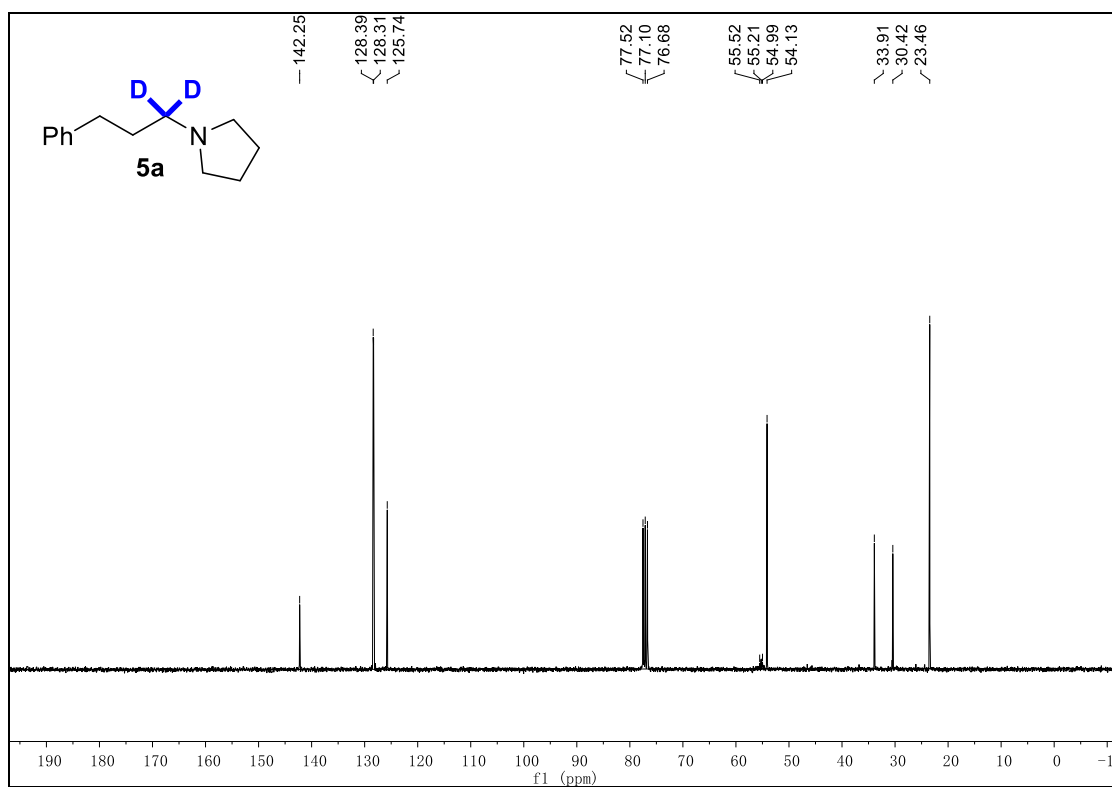
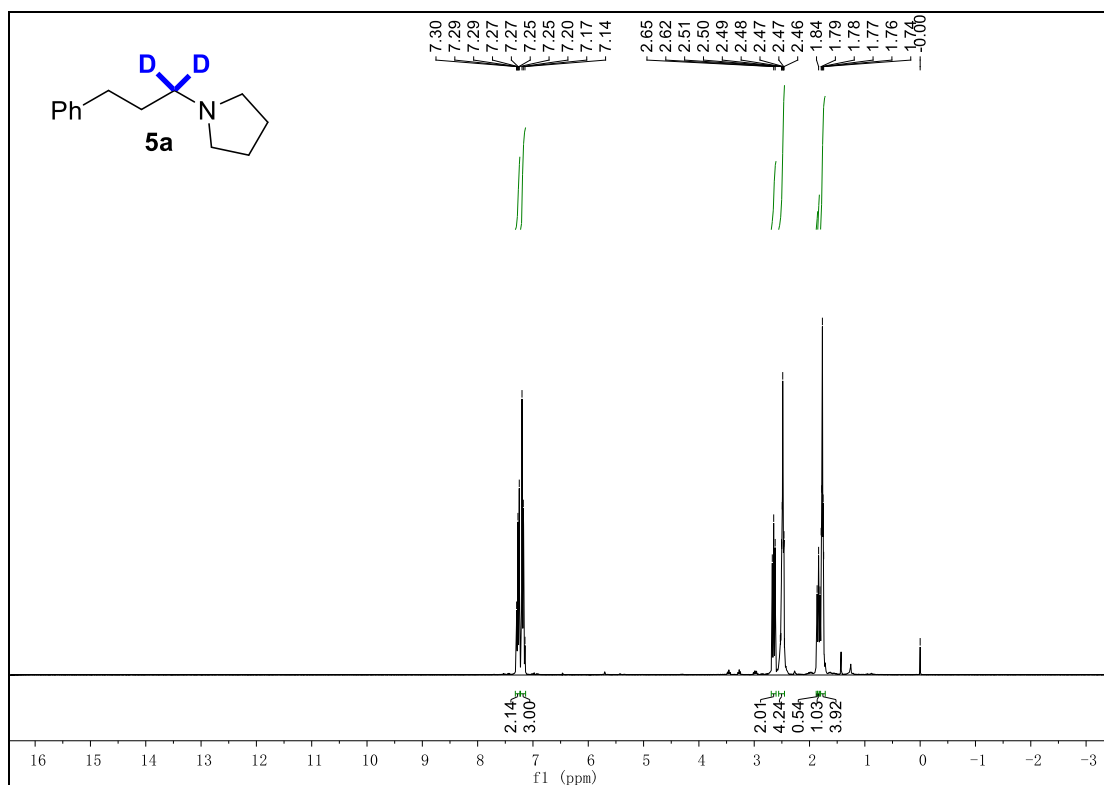


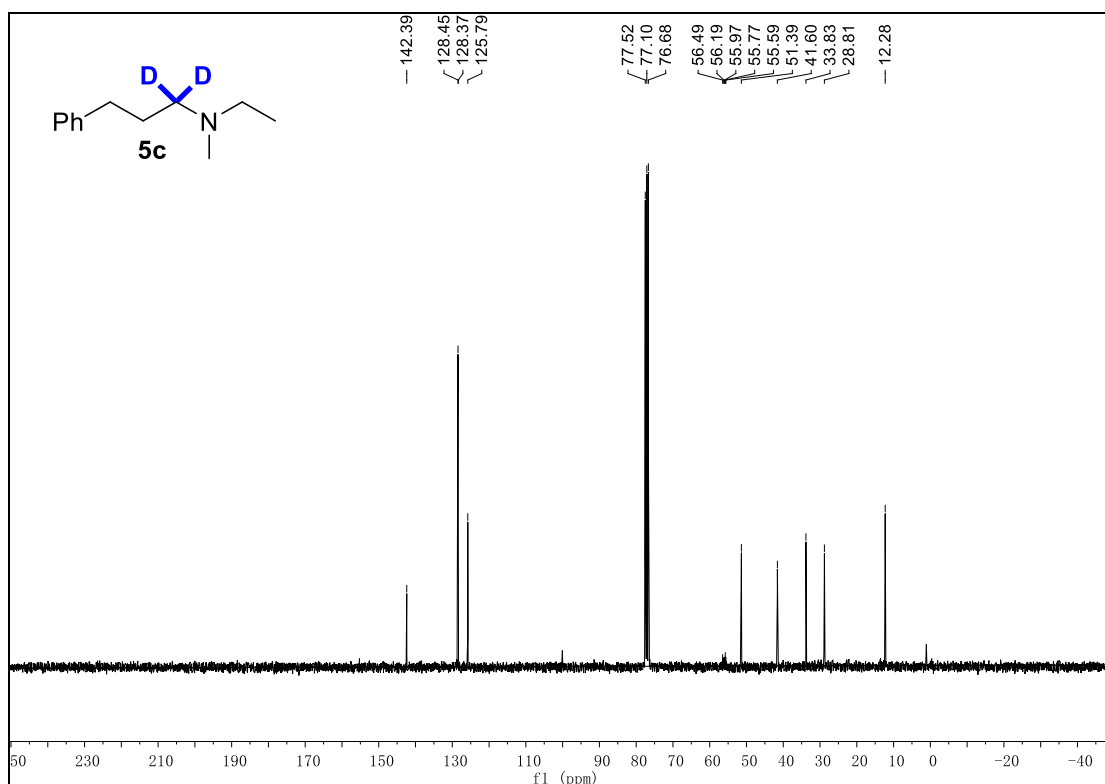
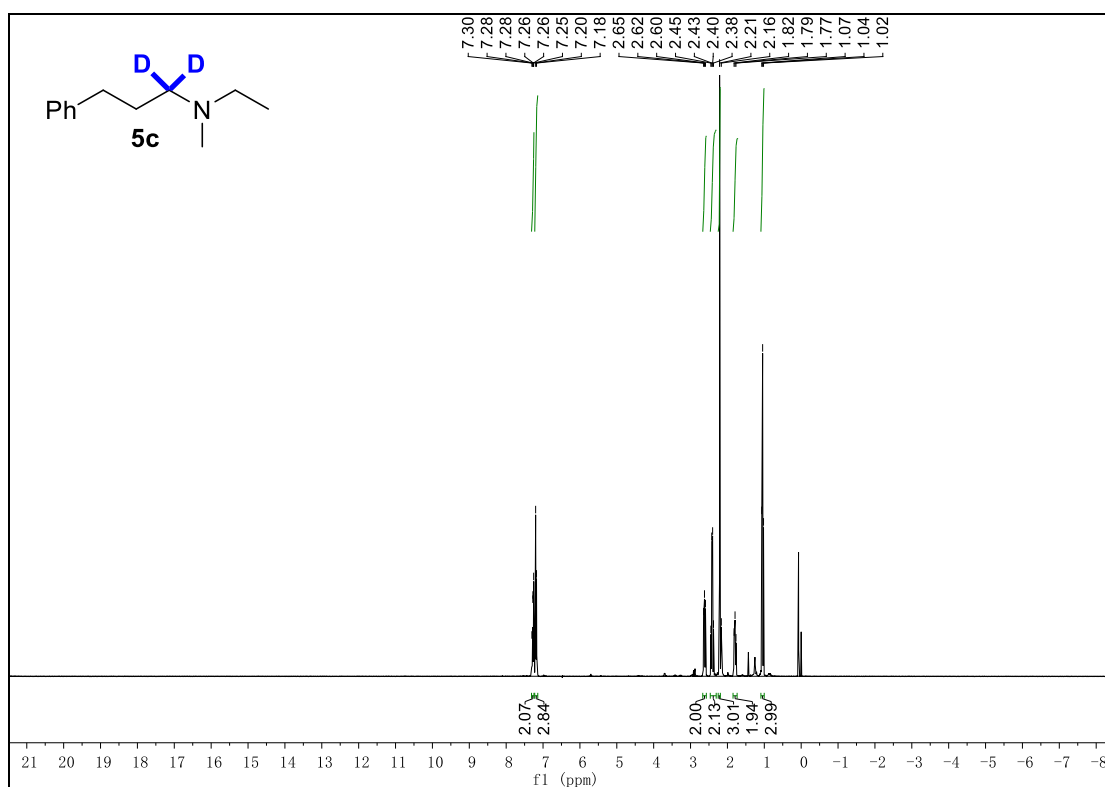


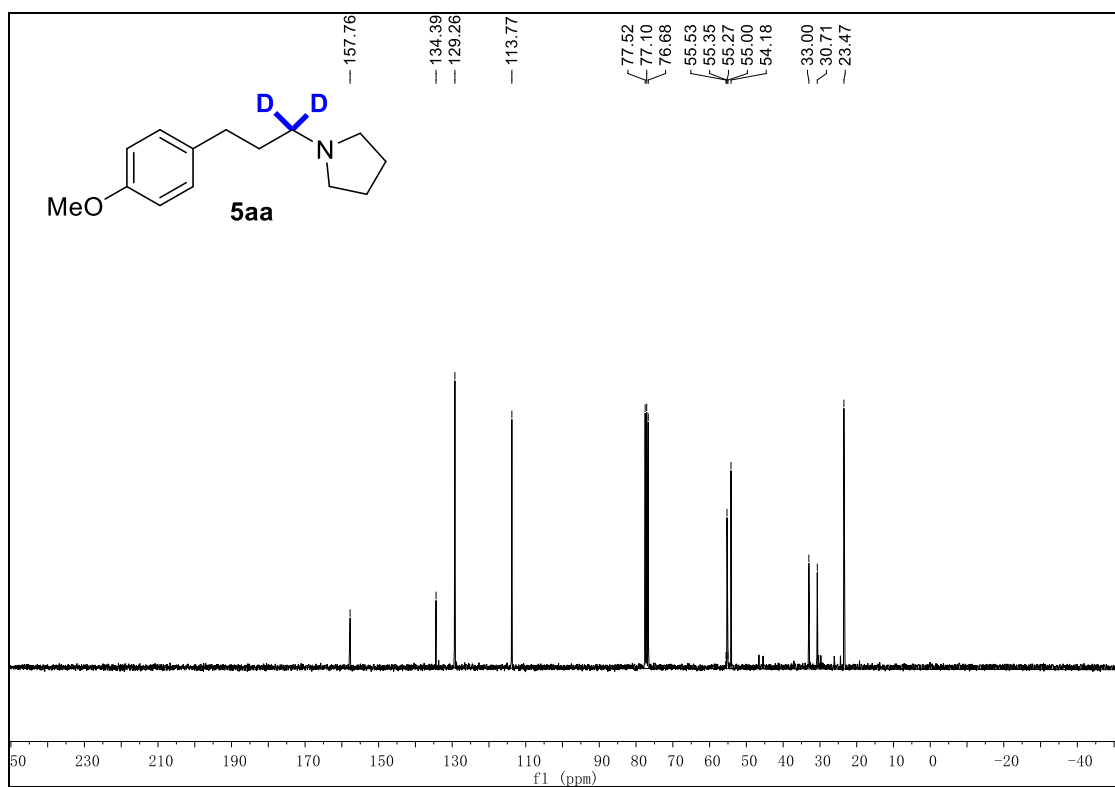
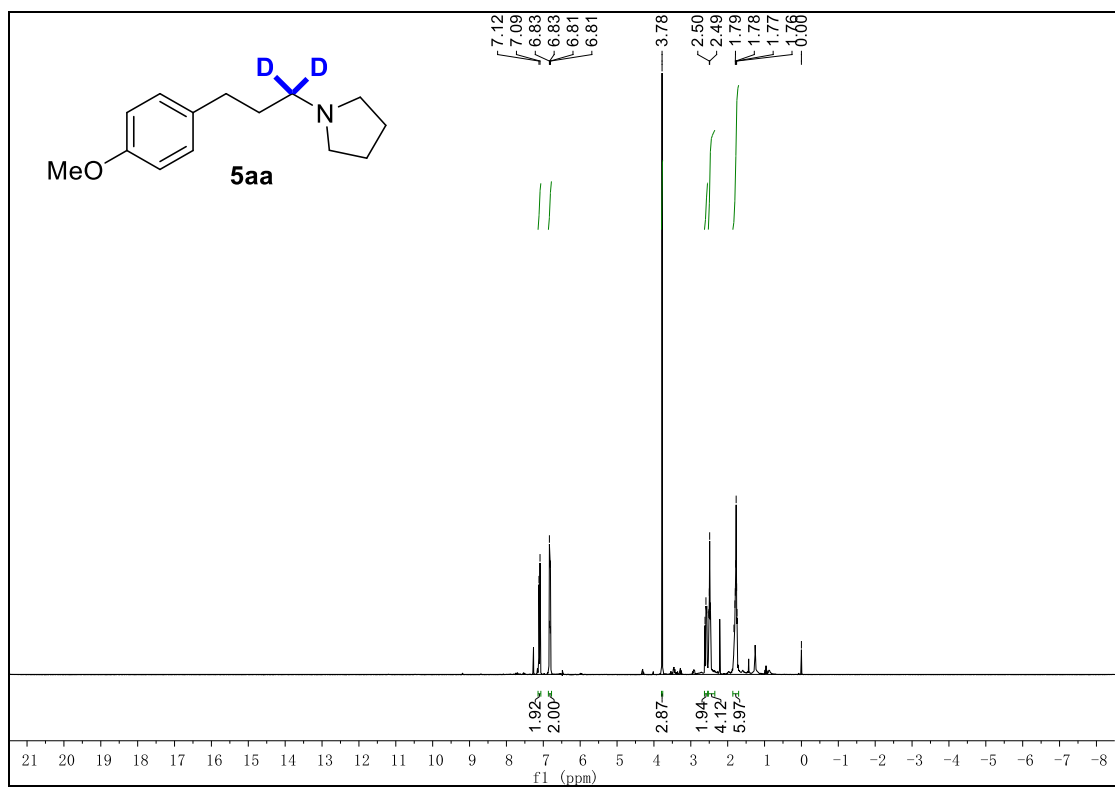


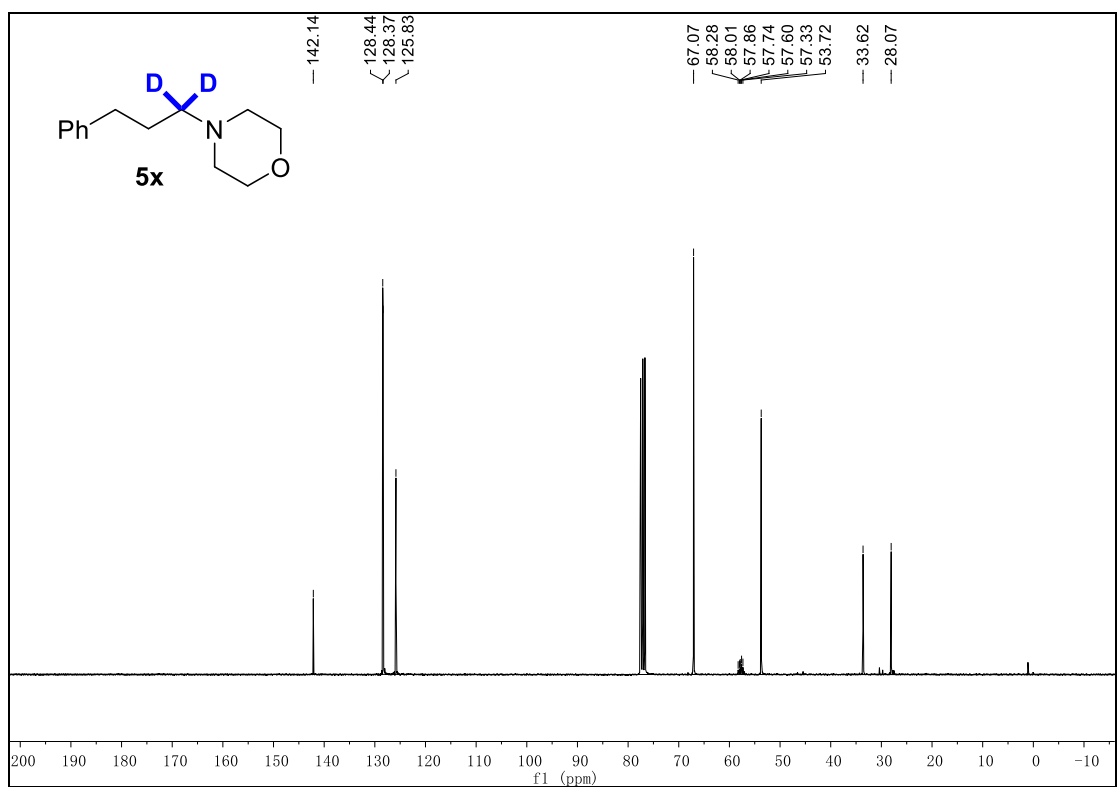
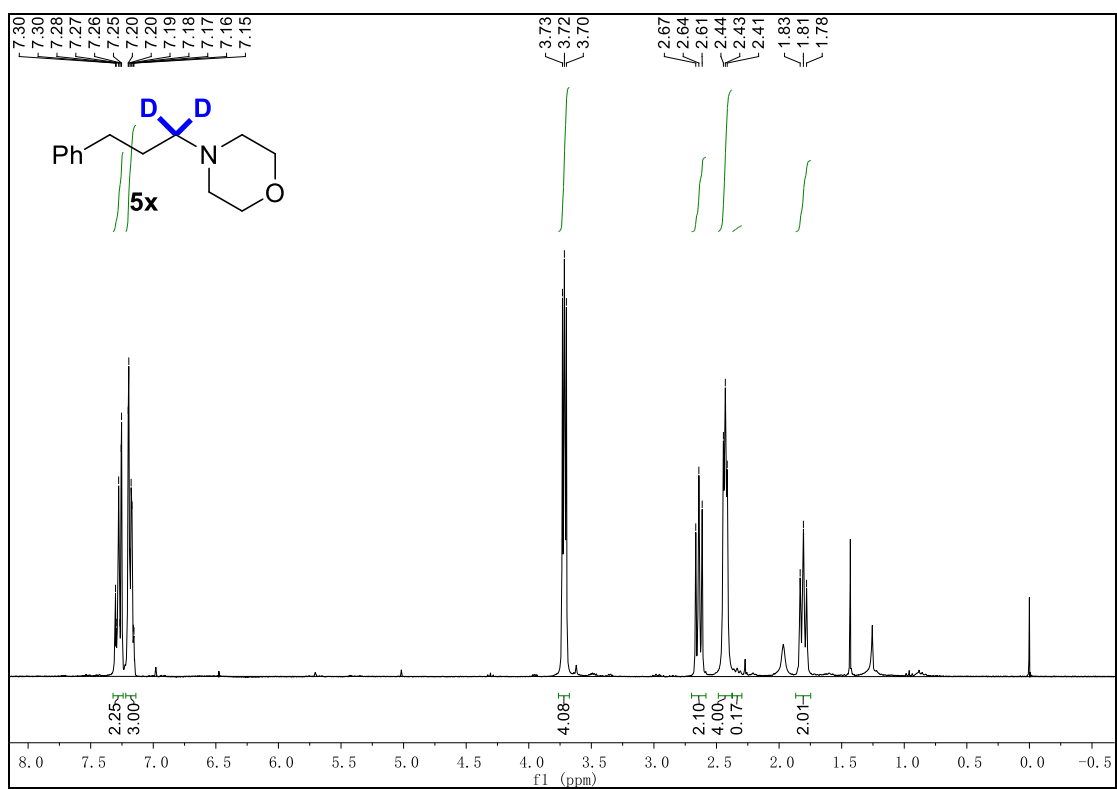












### Photos of Sodium Dispersions and Reaction



Figure S1. Sodium dispersions in oil (particle size 5-10  $\mu\text{m}$ ) was transferred into a glassware via syringe and kept in an open atmosphere for 50 min.

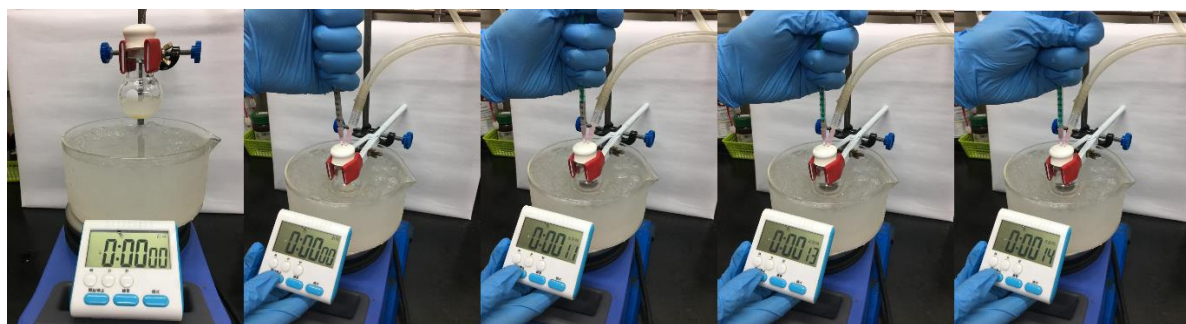


Figure S2. The reduction of **3a** using Na/NaOH/H<sub>2</sub>O (1.5 mmol scale)