

Supplementary Materials

Copper(I) Catalyzed Cross-Coupling of 1-Bromoalkynes with N-Heterocyclic Organozinc Reagents

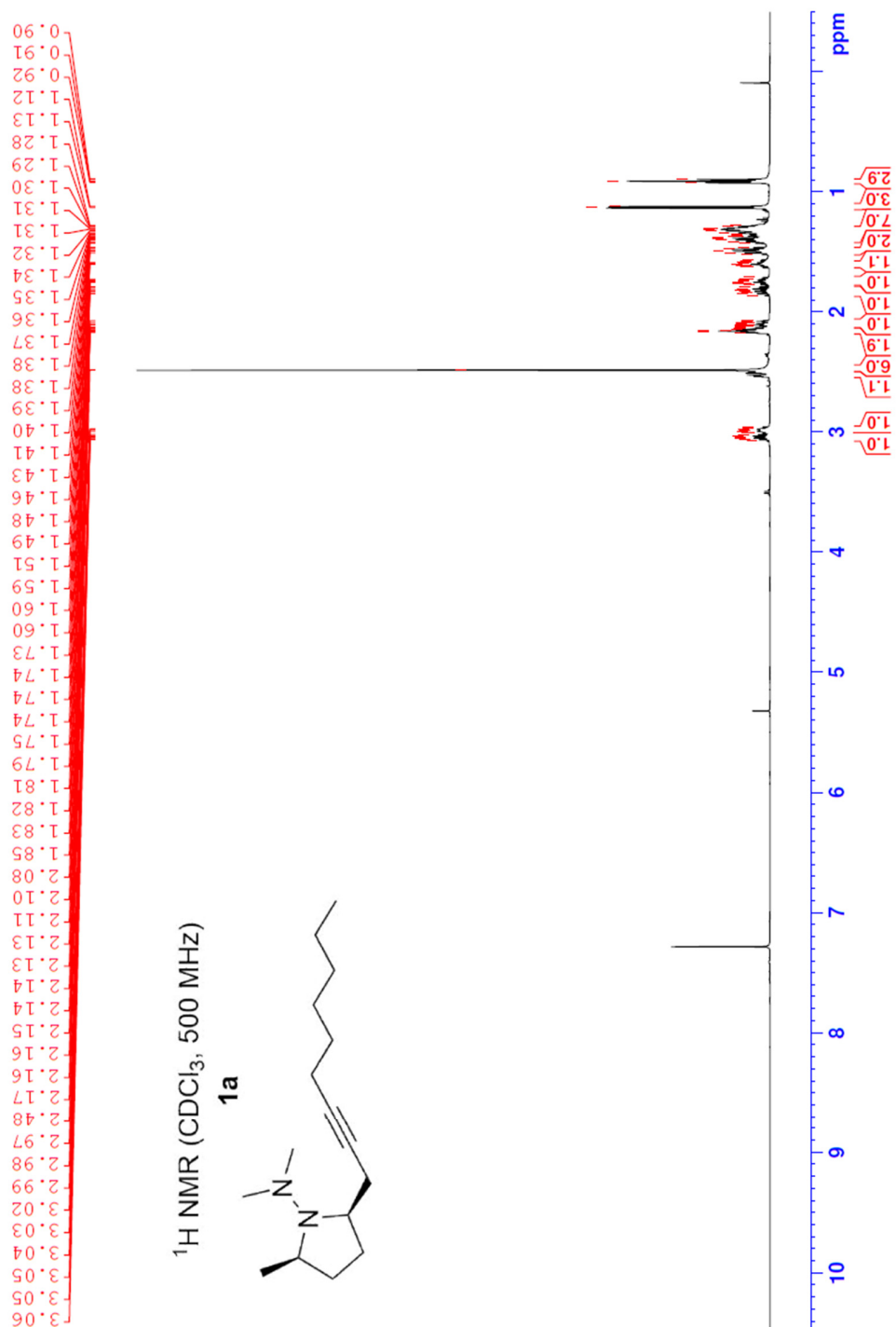
Christian Frabitore, Jérôme Lépeule, and Tom Livinghouse

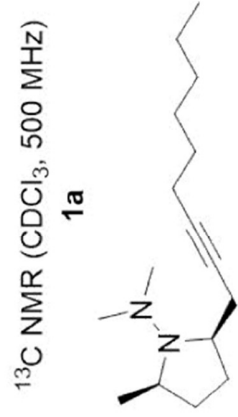
Department of Chemistry and Biochemistry, Montana State university, Bozeman, MT, 59717, USA

S1- ^1H NMR and ^{13}C NMR spectra of products **1a**, **2a**, **3a**, **1b**, and **2b**.

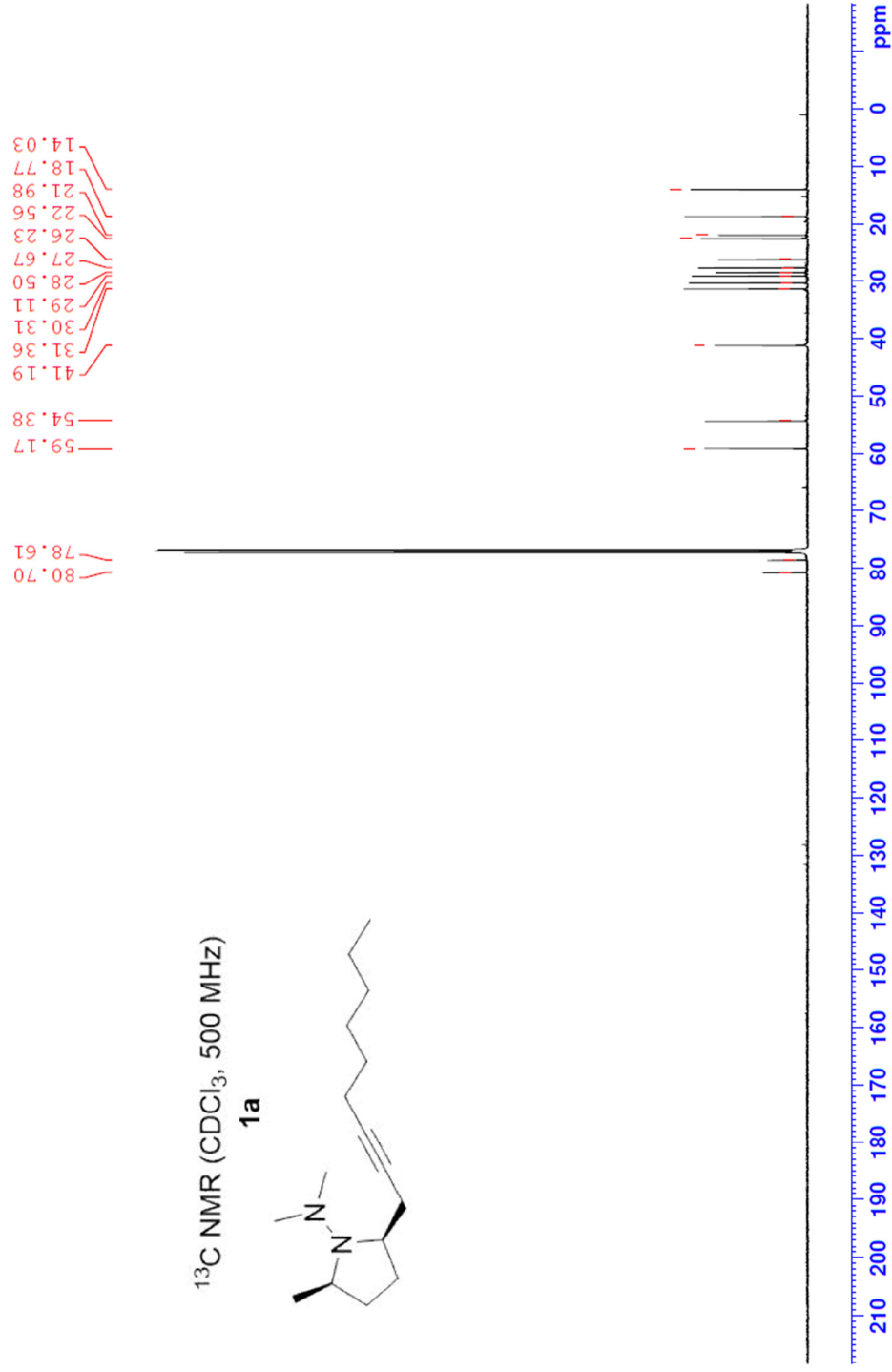
S2- ^1H NMR and ^{13}C NMR spectra of 1-bromo-1-octyne and 1-bromo-1-phenylethyne.

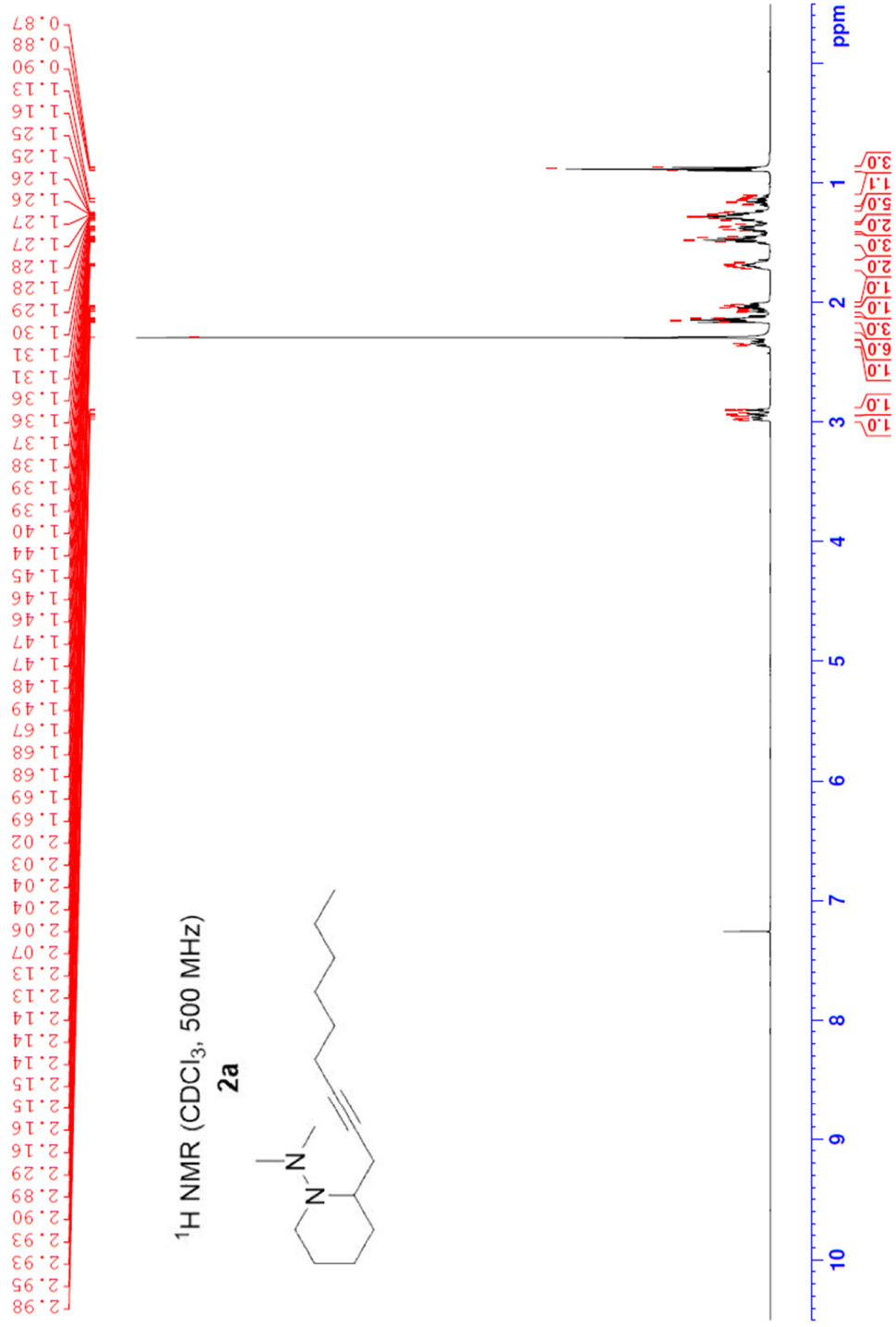
S1:





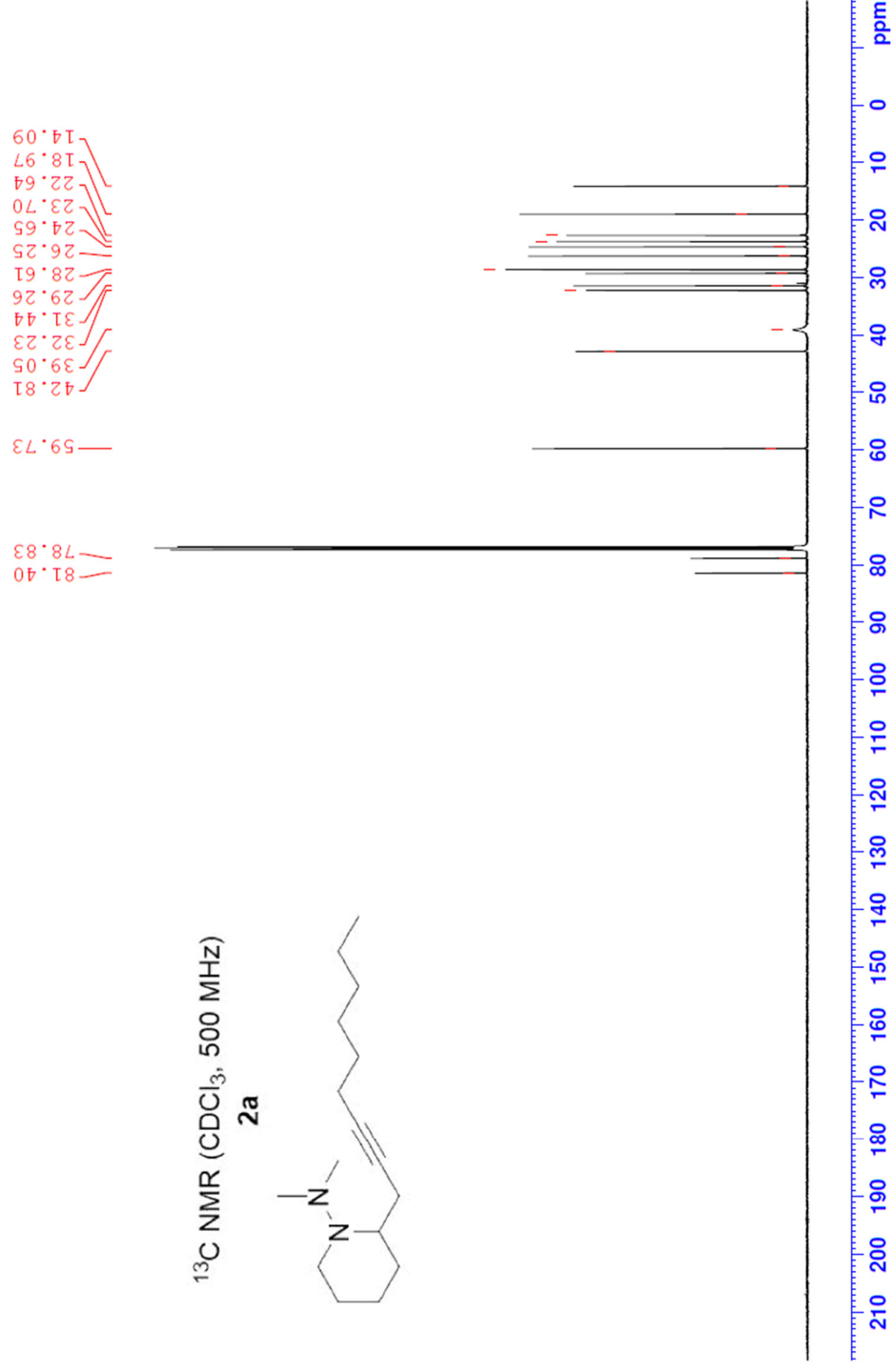
^{13}C NMR (CDCl_3 , 500 MHz)

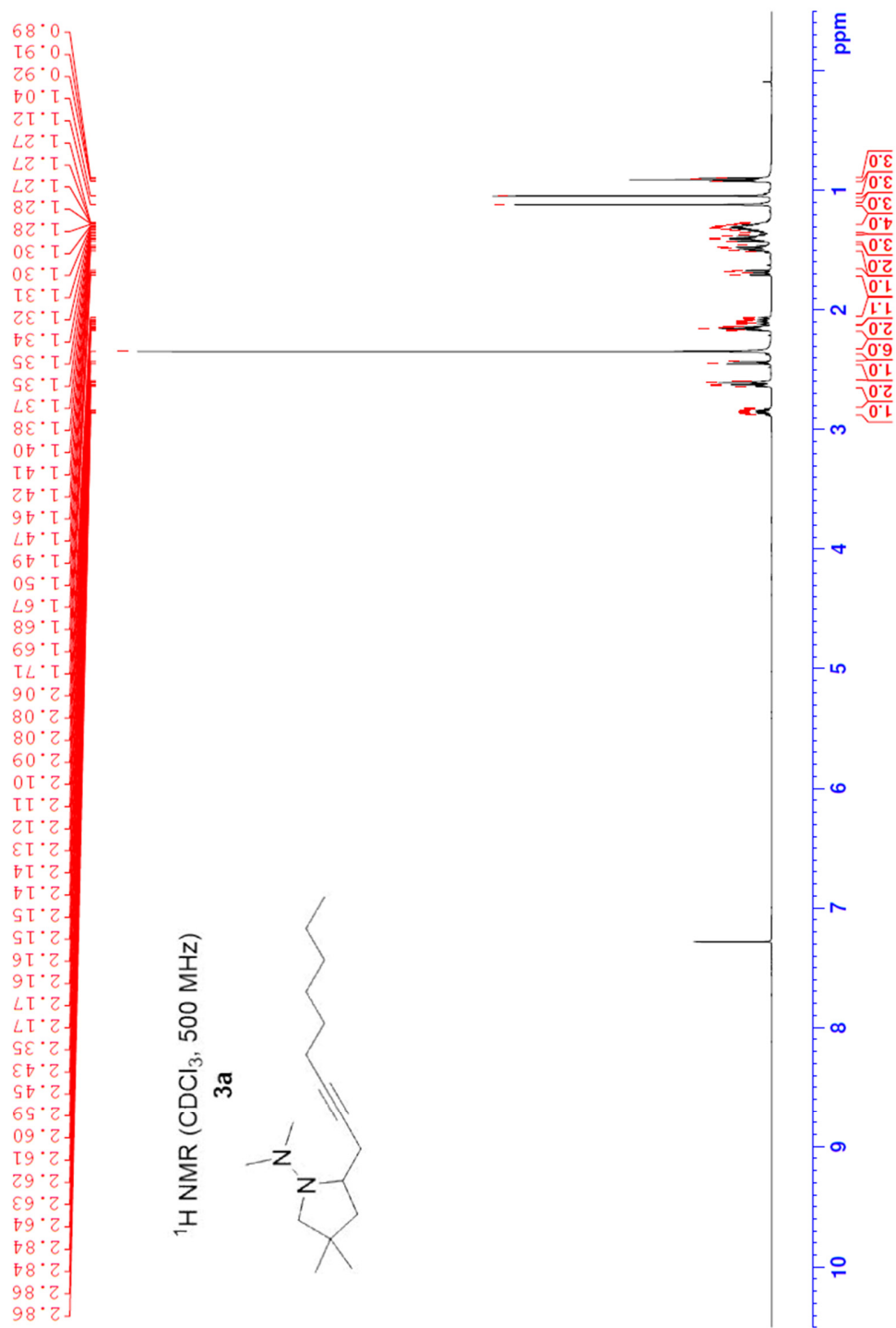


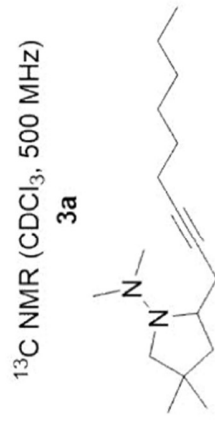


¹³C NMR (CDCl₃, 500 MHz)

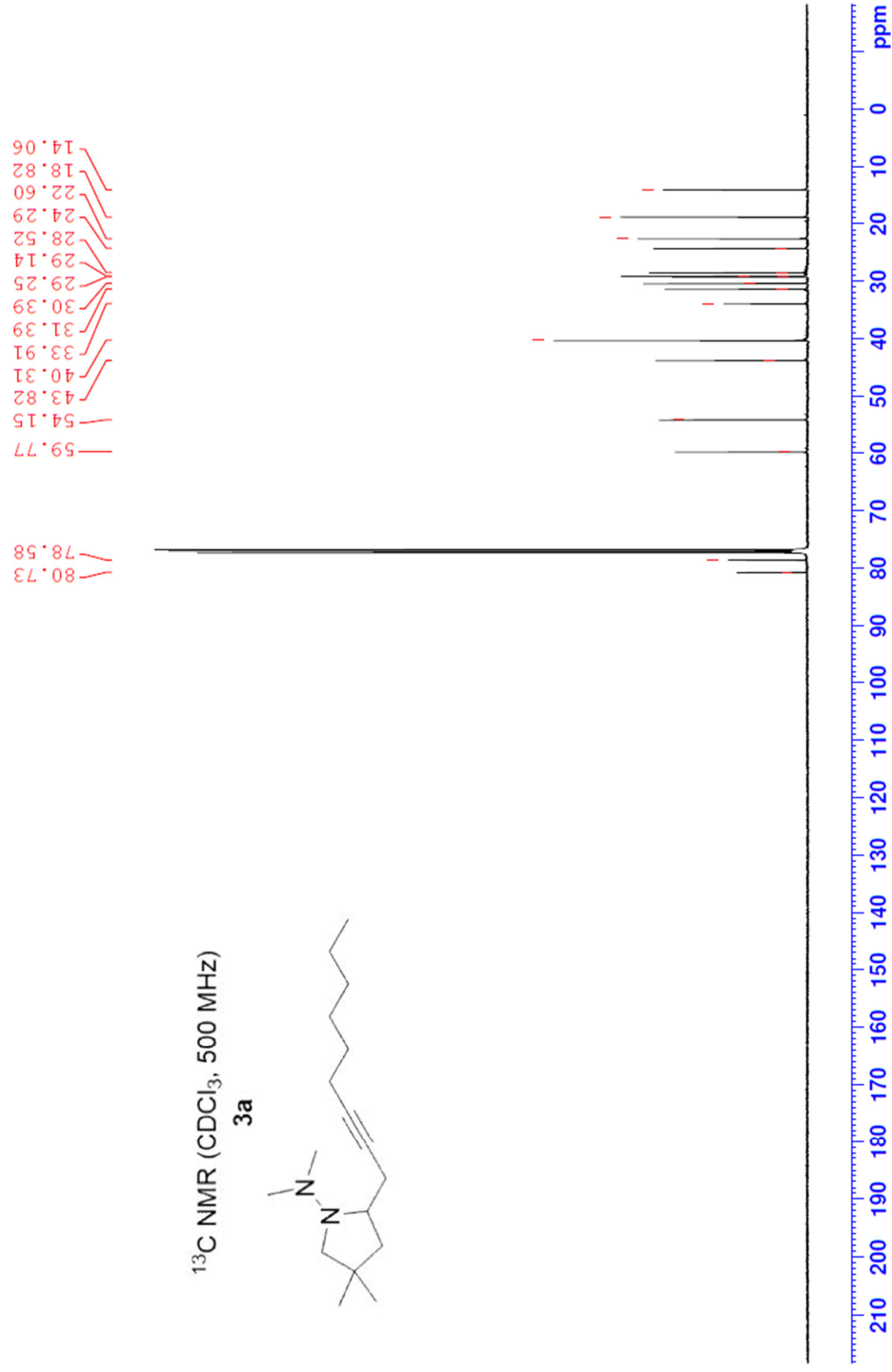
2a

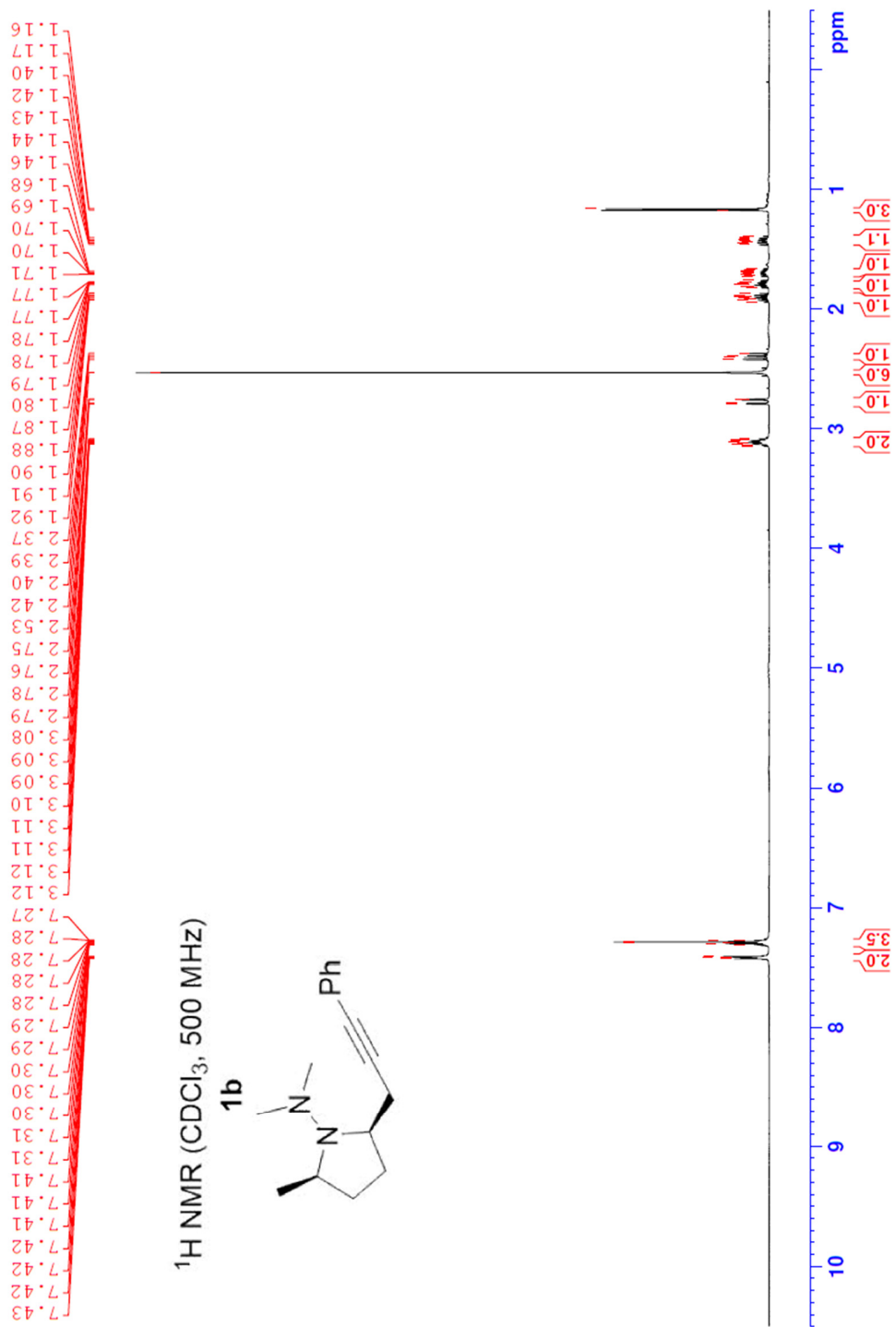




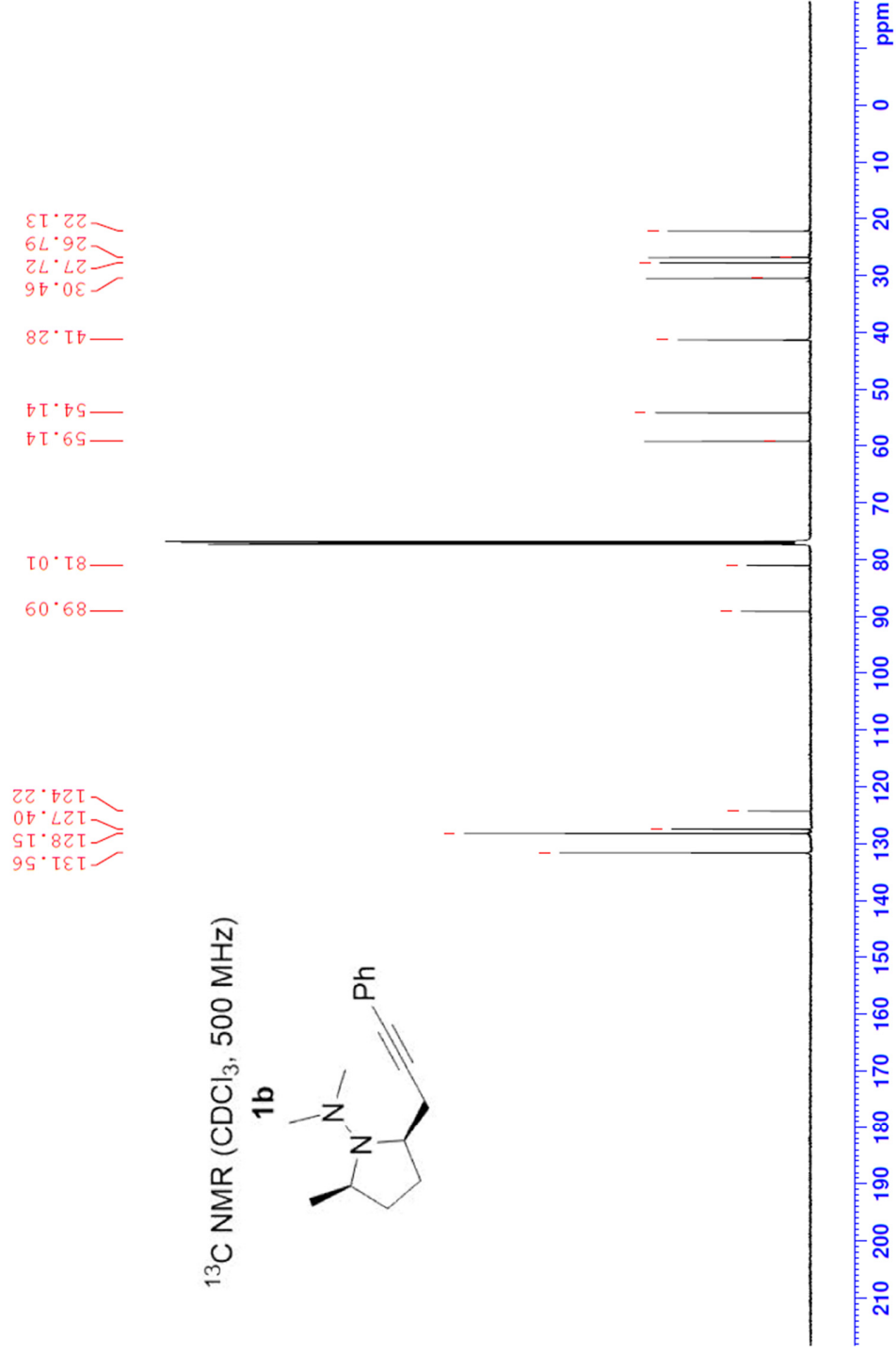
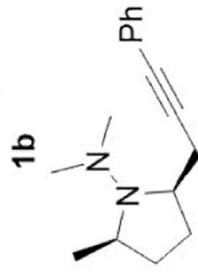


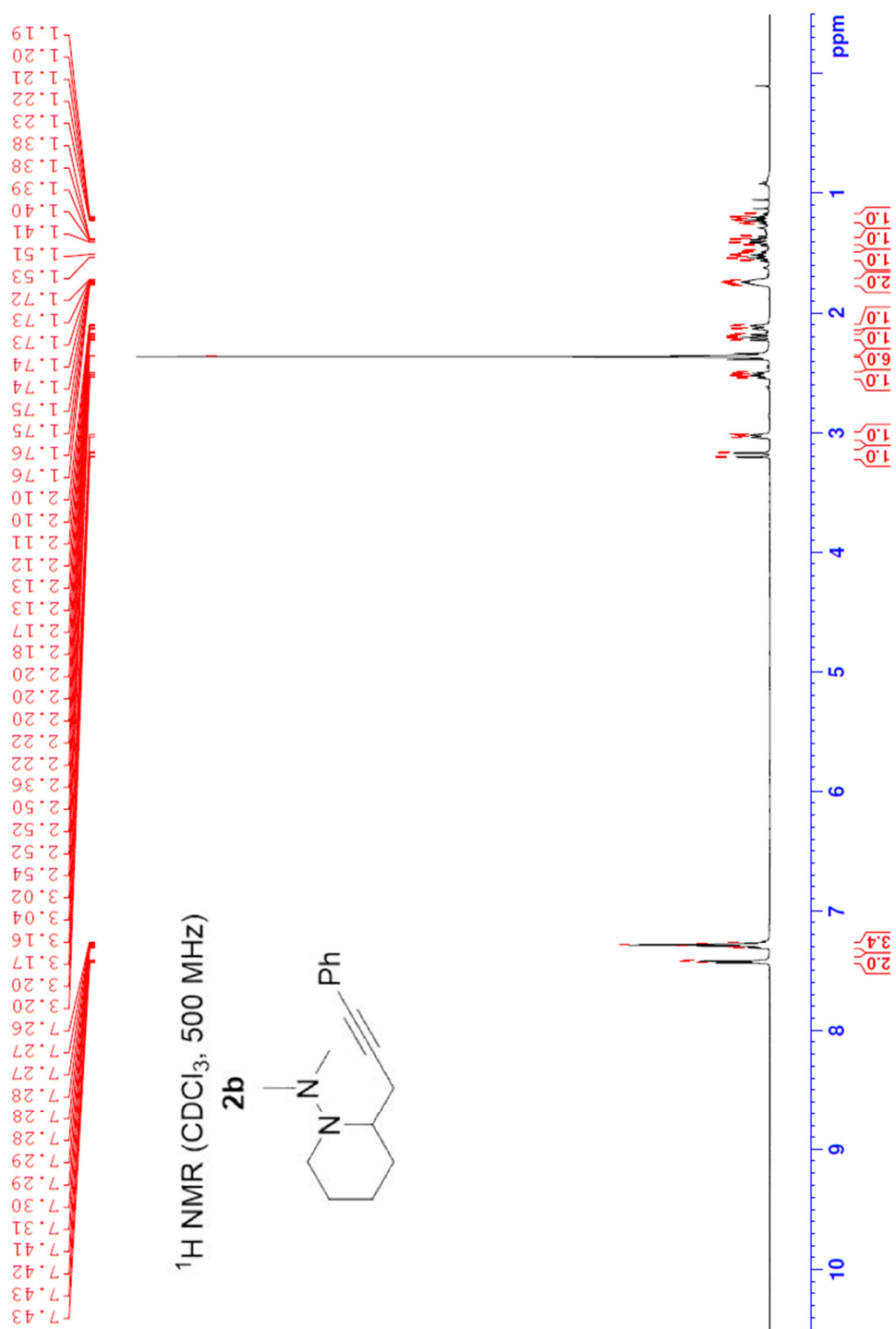
¹³C NMR (CDCl₃, 500 MHz)





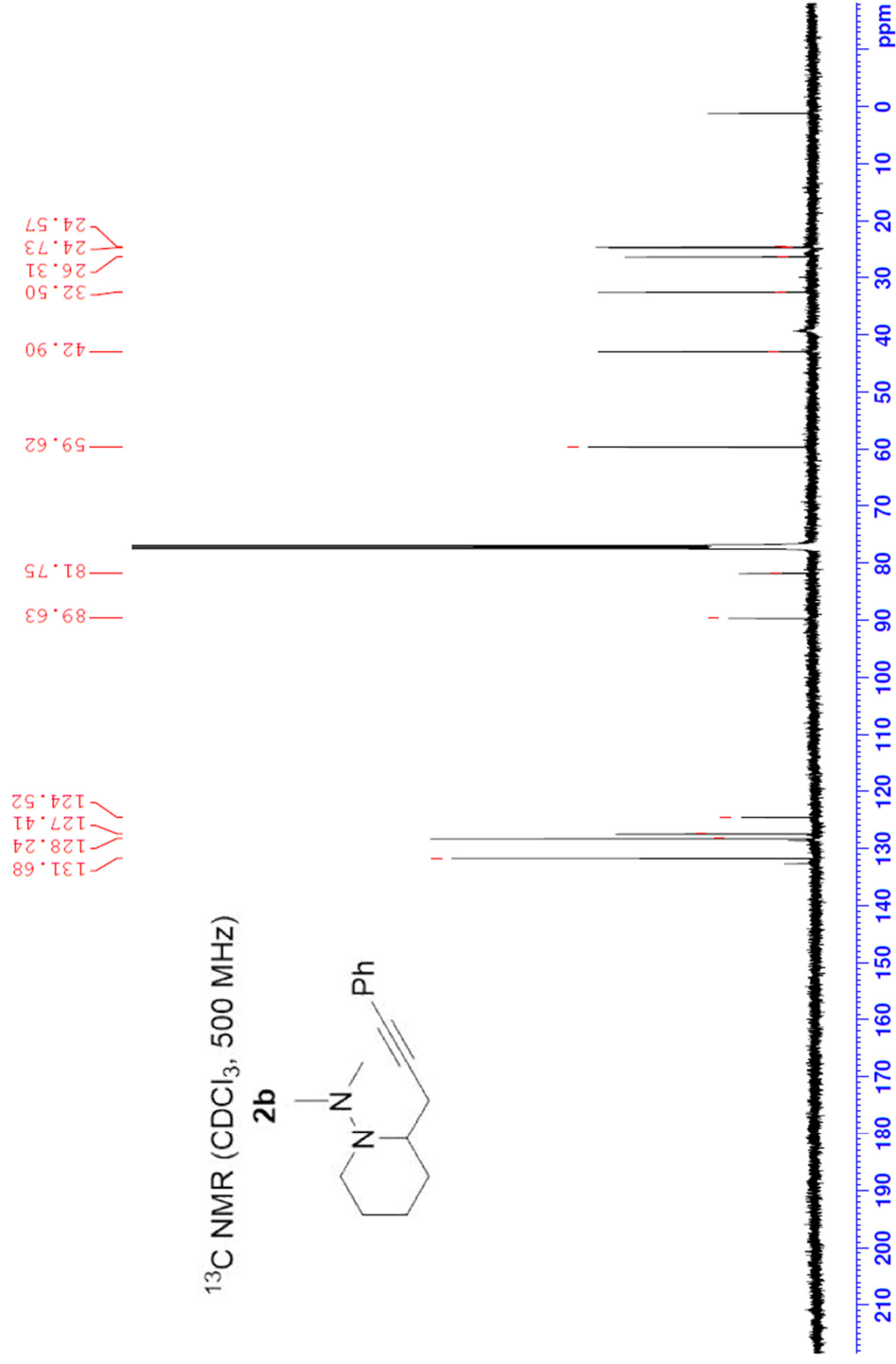
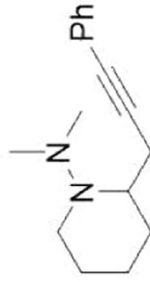
¹³C NMR (CDCl₃, 500 MHz)



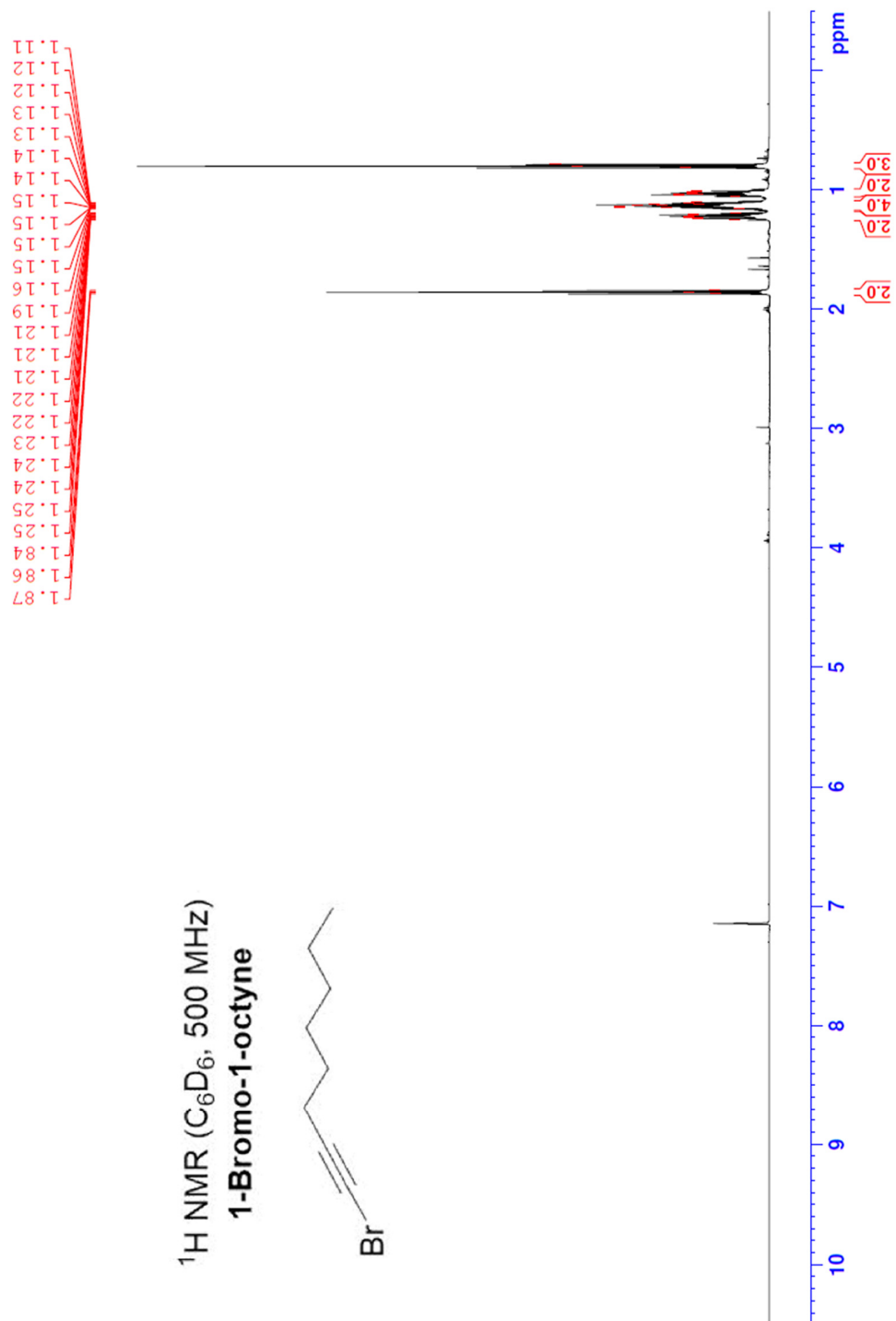


¹³C NMR (CDCl₃, 500 MHz)

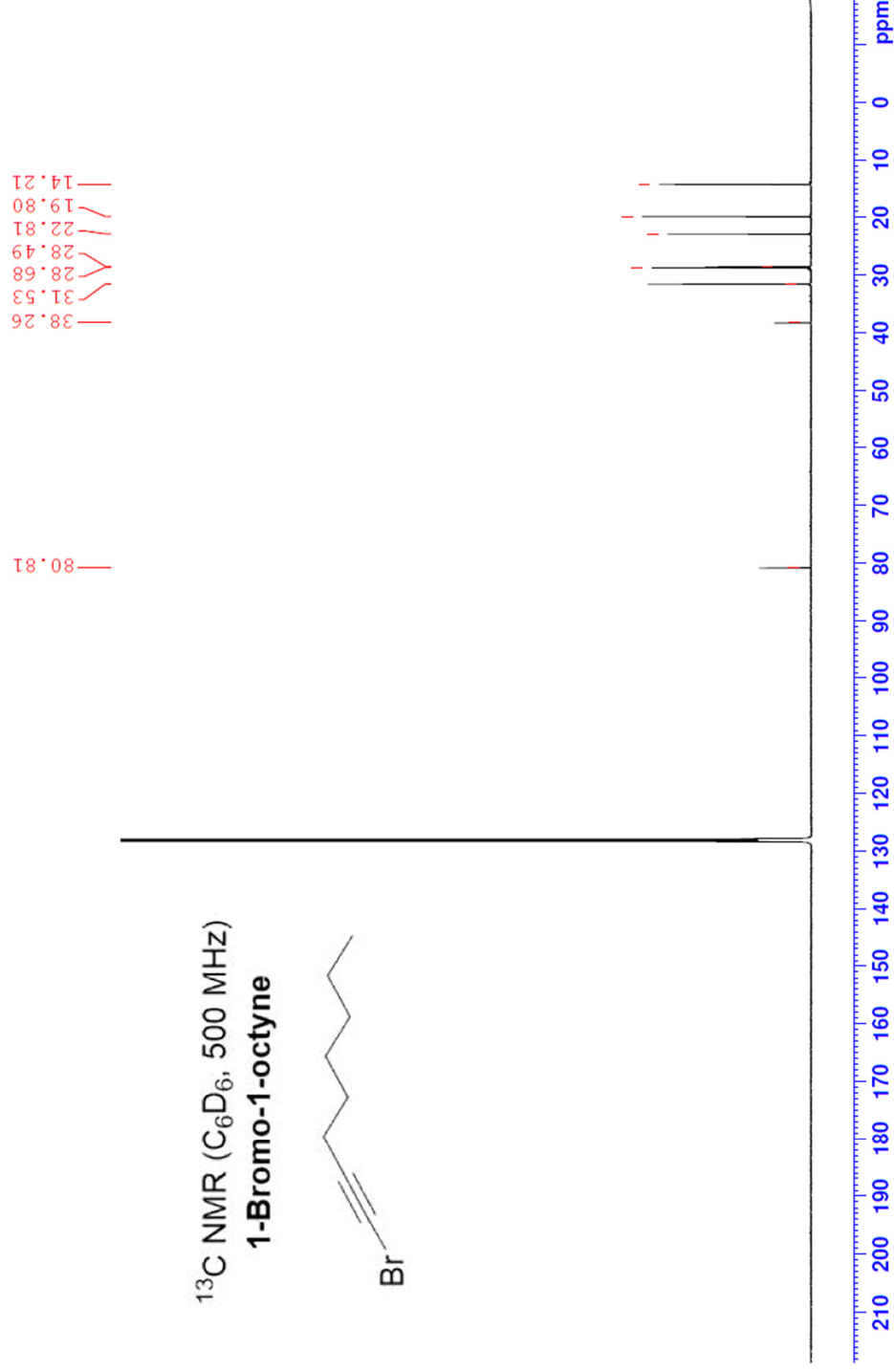
2b



S2:



¹³C NMR (C₆D₆, 500 MHz)
1-Bromo-1-octyne



7.27
7.26
7.26
7.26
7.25
7.25
7.25
7.25
7.25
6.92
6.91
6.90
6.90
6.89
6.89
6.88
6.88
6.88
6.87
6.87
6.86
6.86
6.85
6.85
6.84
6.84

^1H NMR (C_6D_6 , 500 MHz)
1-Bromo-2-phenylethyne

