Supporting Information

A selective hybrid fluorescent sensor for fructose detection based on a pheylboronic acid and BODIPY-based hydrophobicity probe

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Table of contents

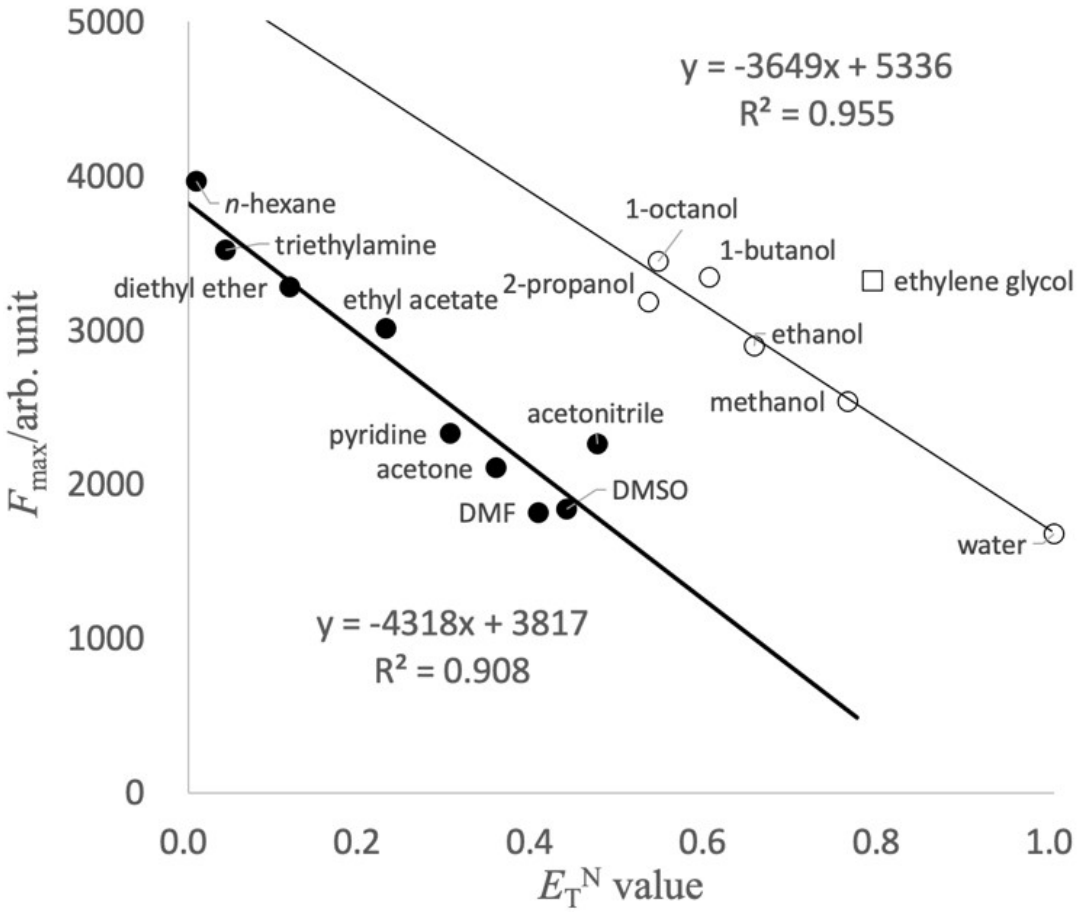


Figure S1. A correlation plot of the fluorescence intensities of HPSensor2 vs. the E_T^N value of the respective solvent.

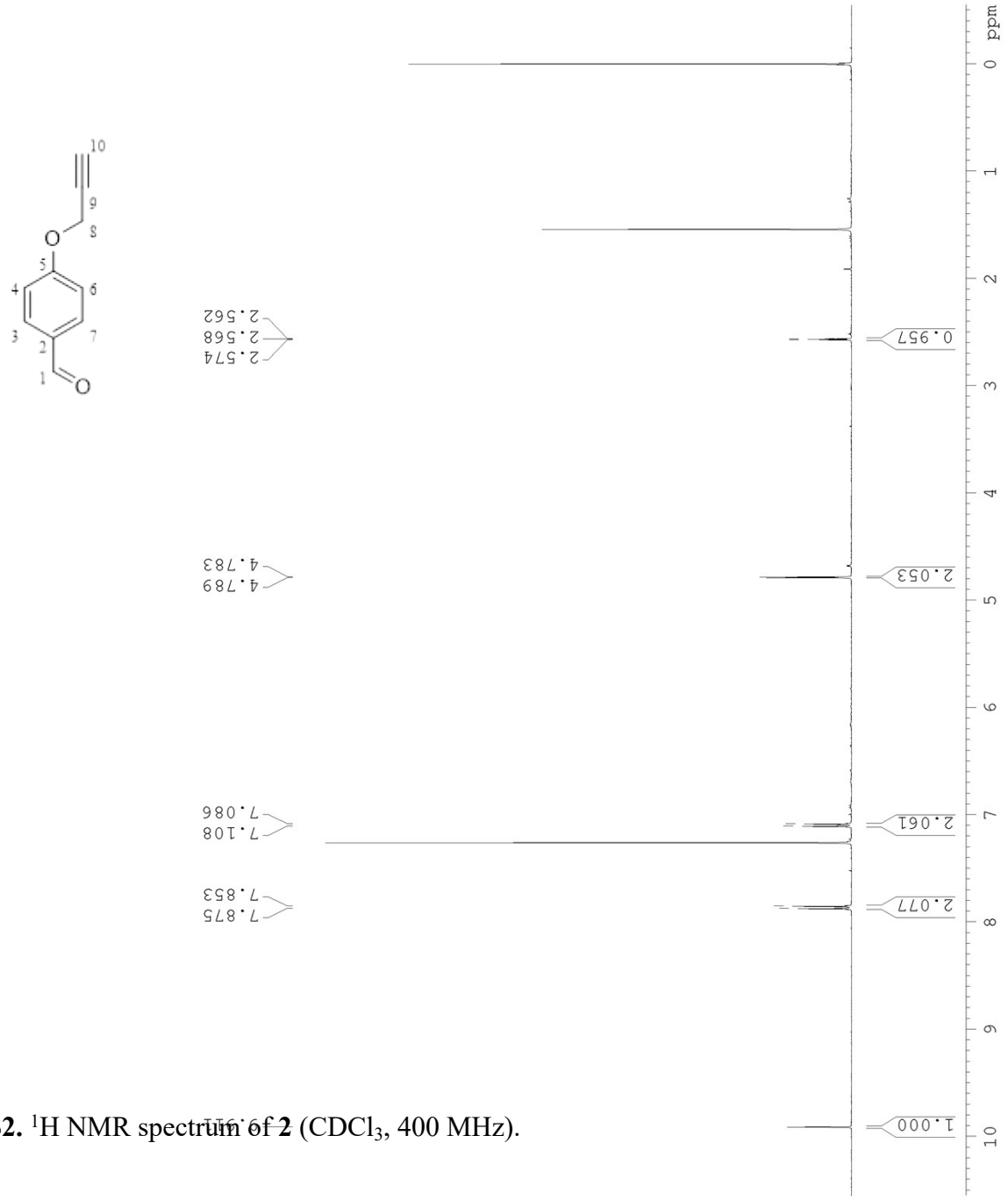


Figure S2. ^{1}H NMR spectrum of **2** ($CDCl_3$, 400 MHz).

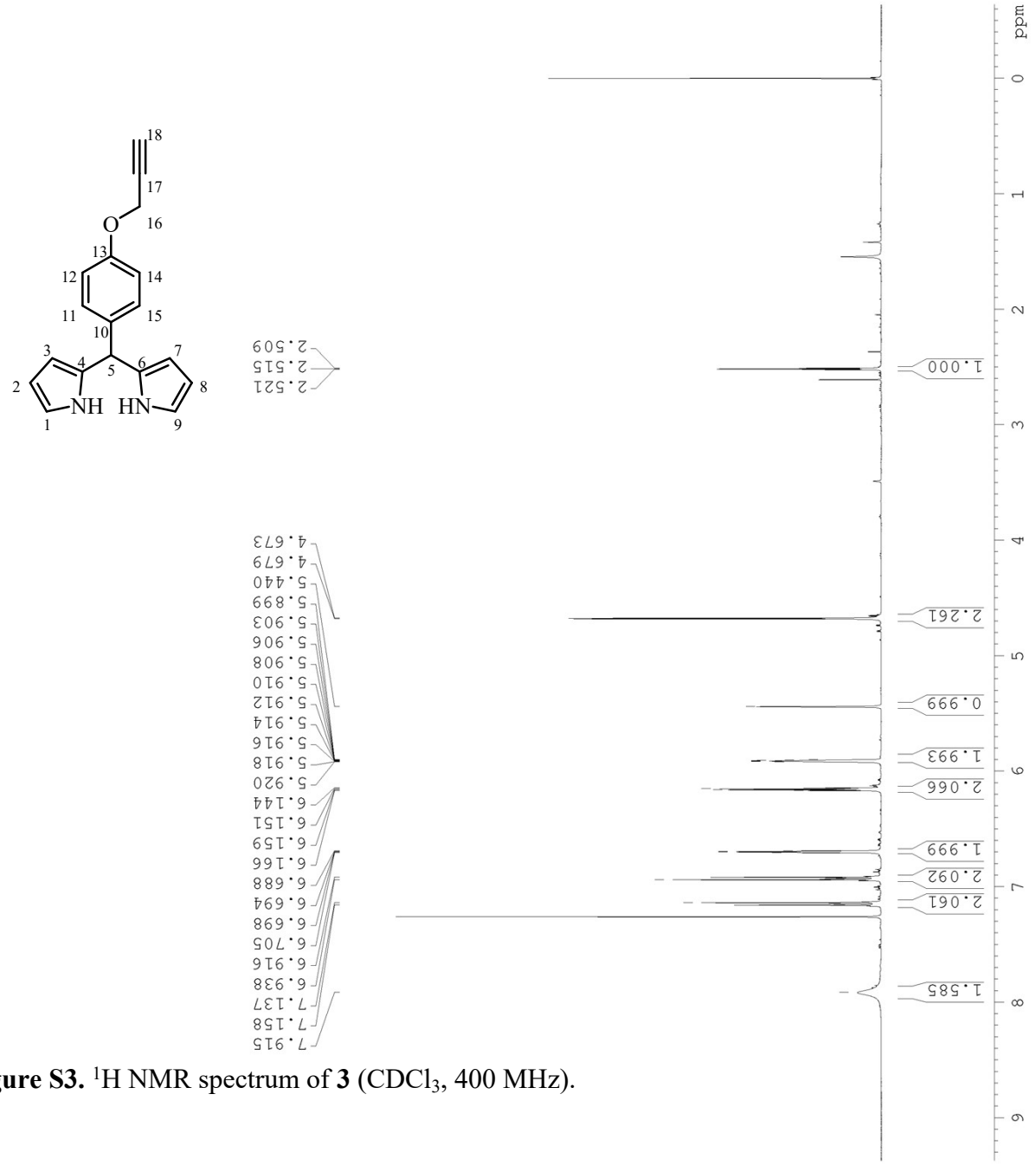


Figure S3. ^{1}H NMR spectrum of **3** ($CDCl_3$, 400 MHz).

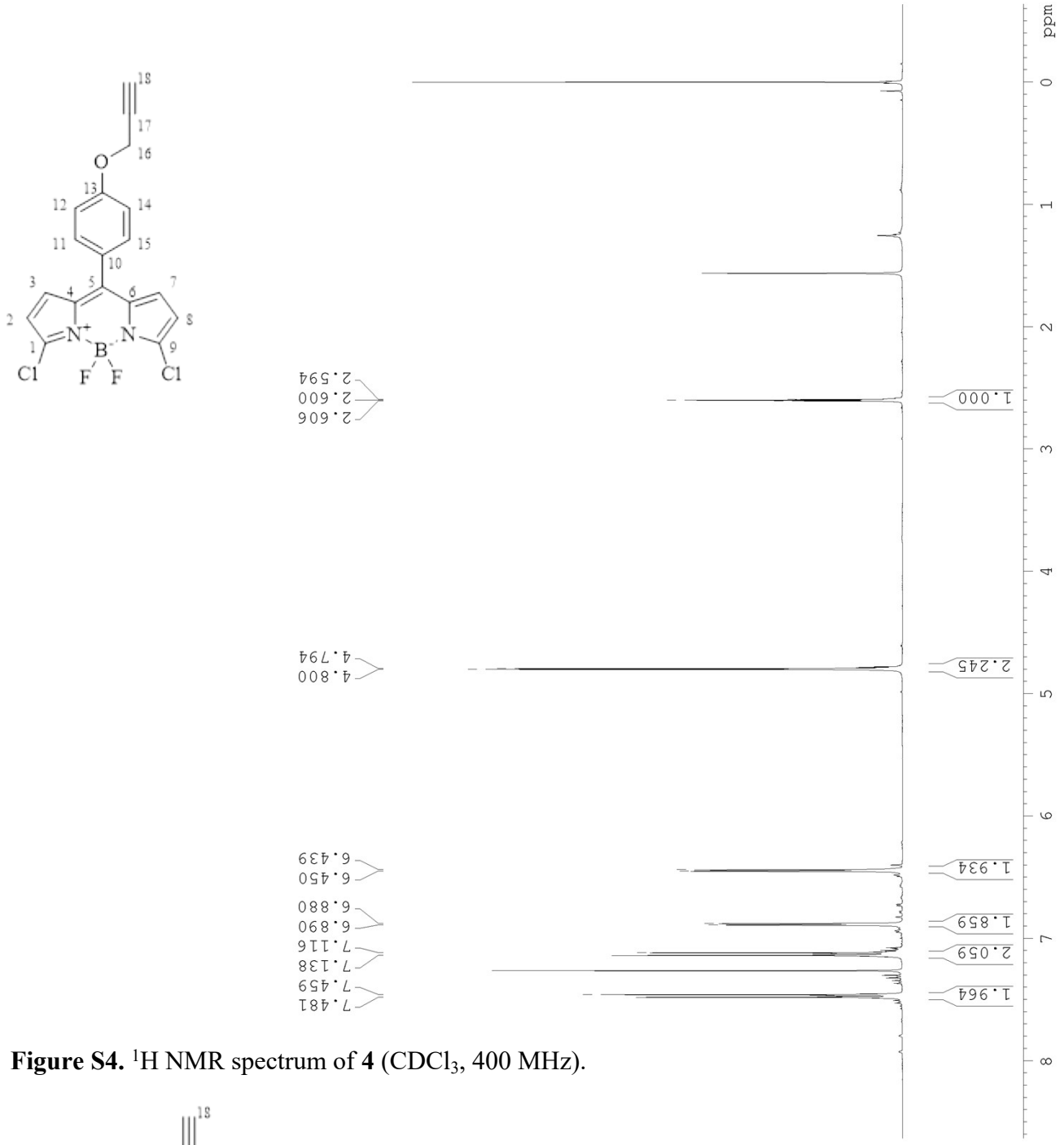
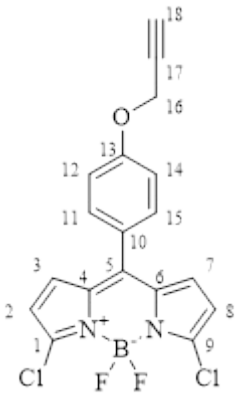


Figure S4. ^{1}H NMR spectrum of **4** ($CDCl_3$, 400 MHz).



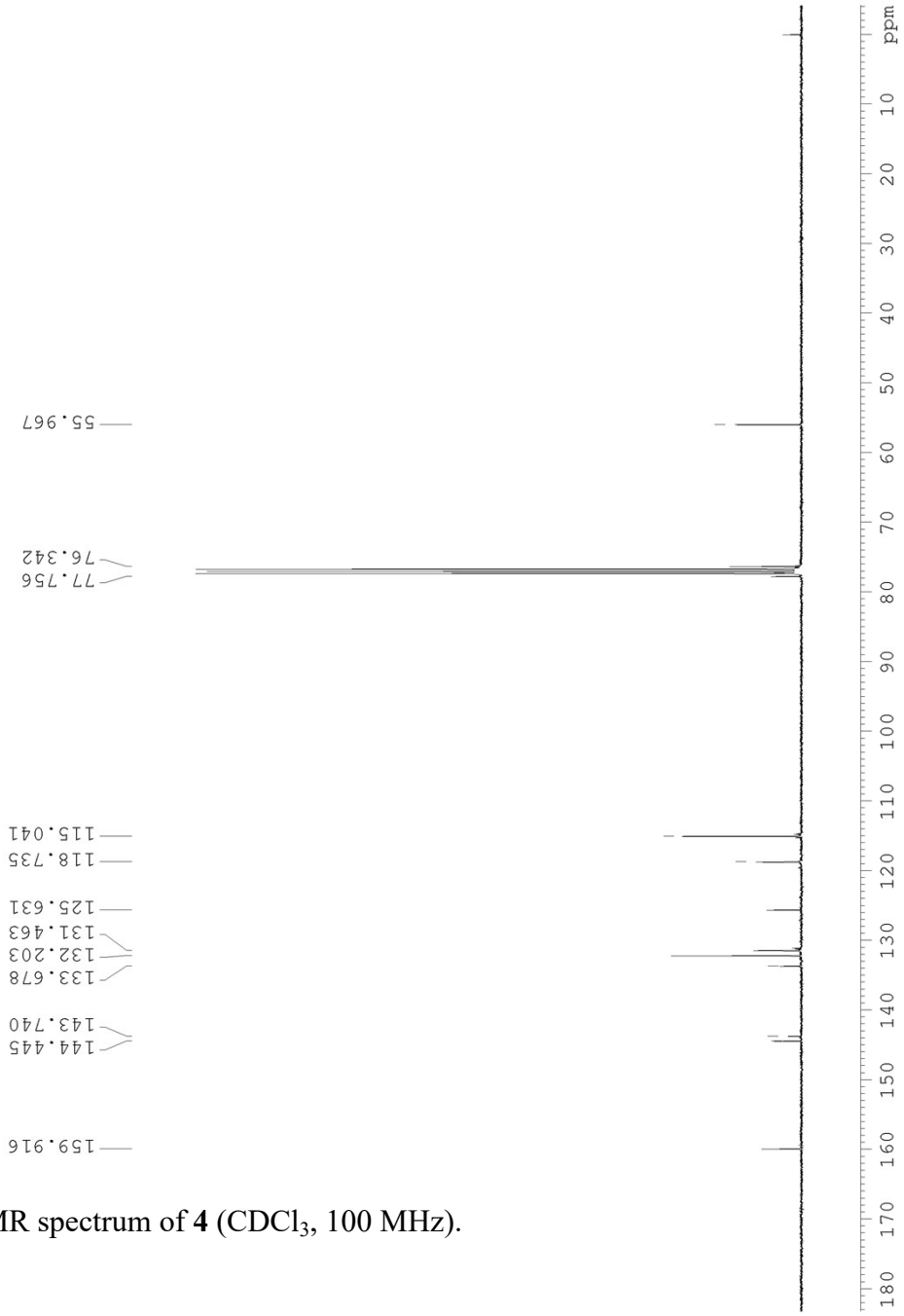


Figure S5. $^{13}C\{^{1}H\}$ NMR spectrum of **4** ($CDCl_3$, 100 MHz).

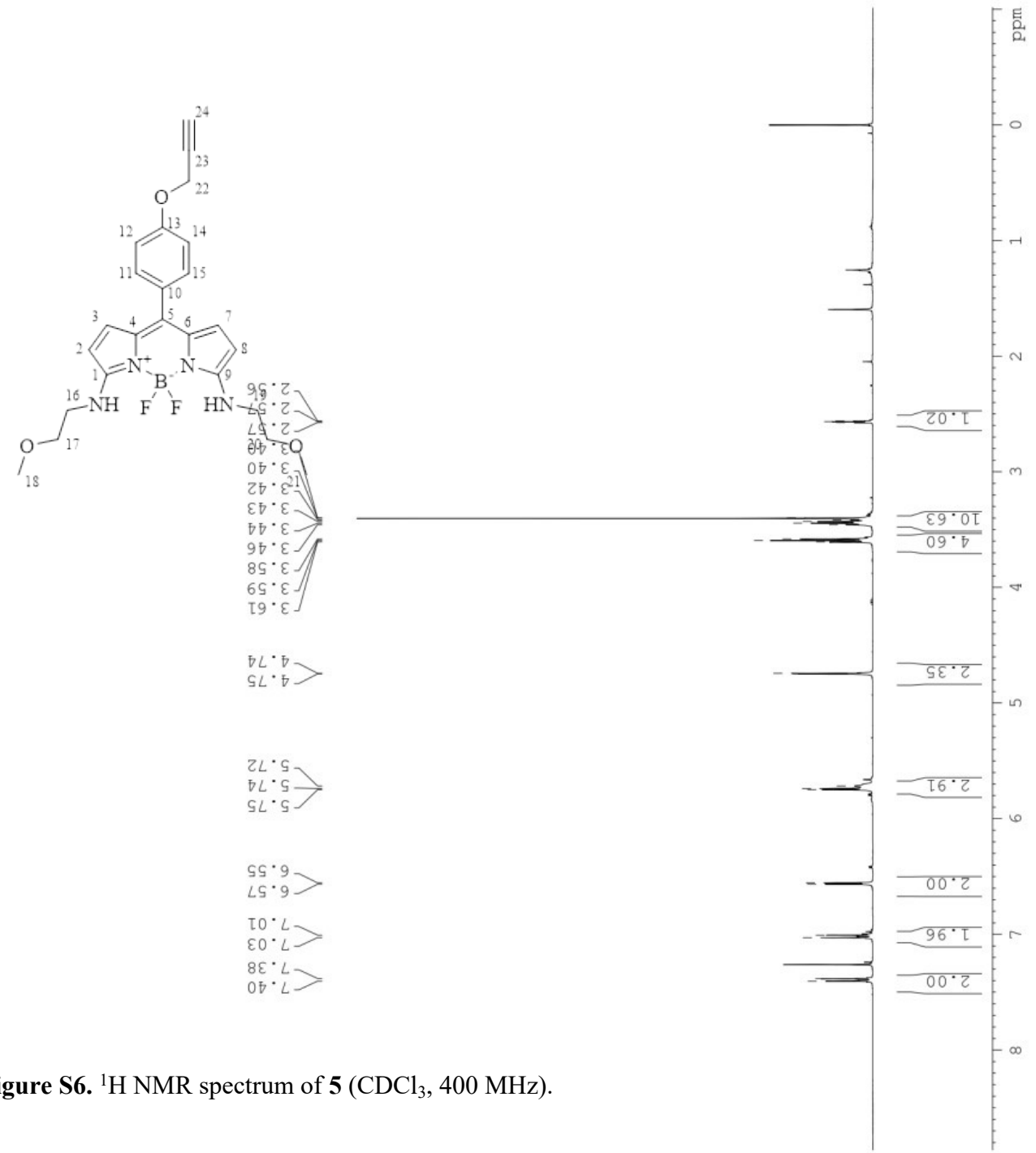


Figure S6. ^{1}H NMR spectrum of **5** ($CDCl_3$, 400 MHz).

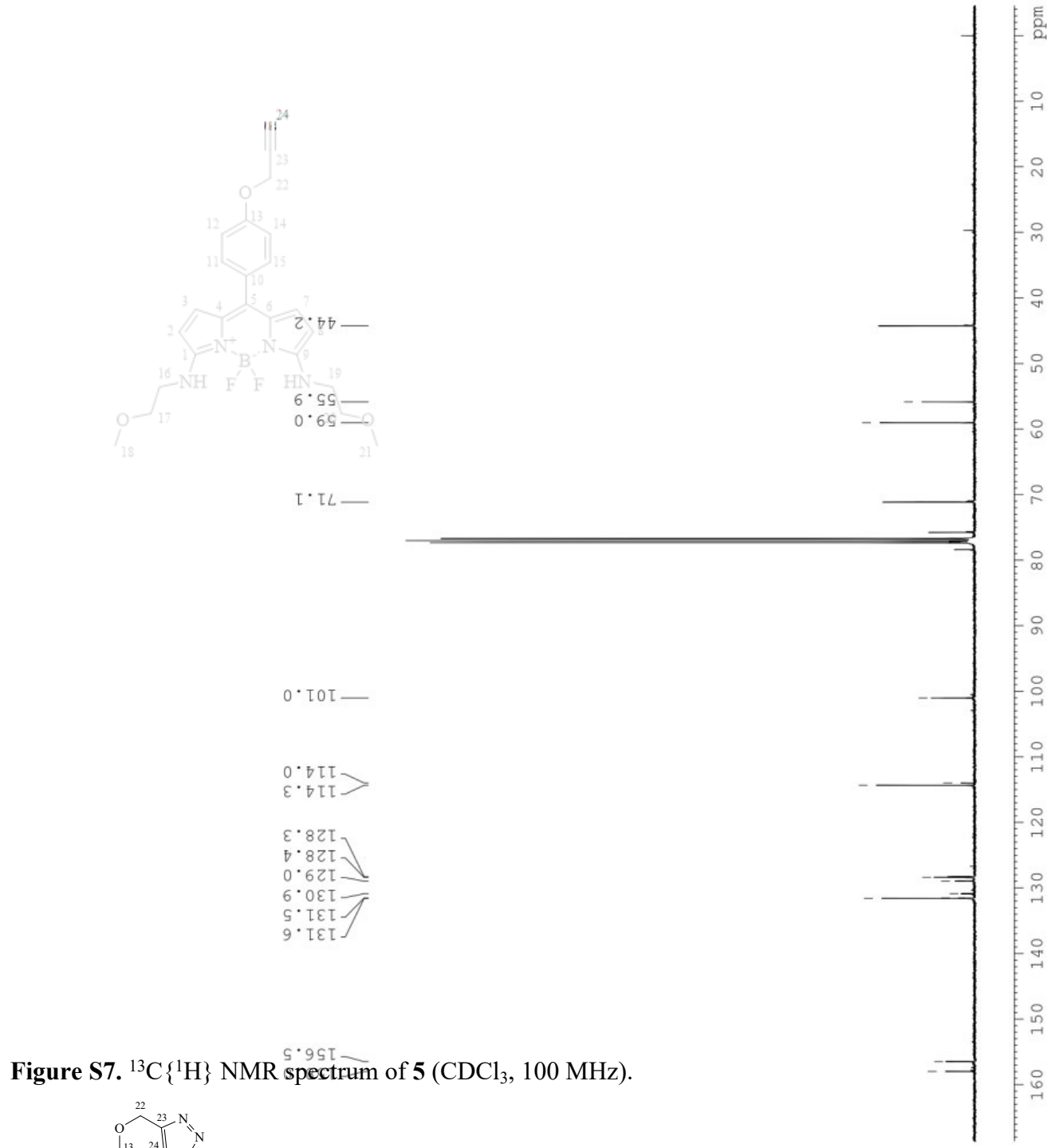
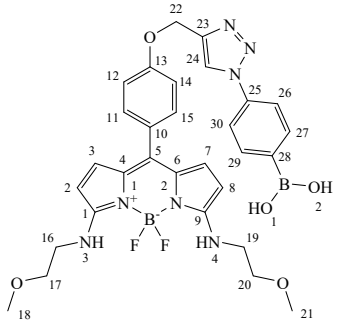


Figure S7. $^{13}C\{^{1}H\}$ NMR spectrum of **5** ($CDCl_3$, 100 MHz).



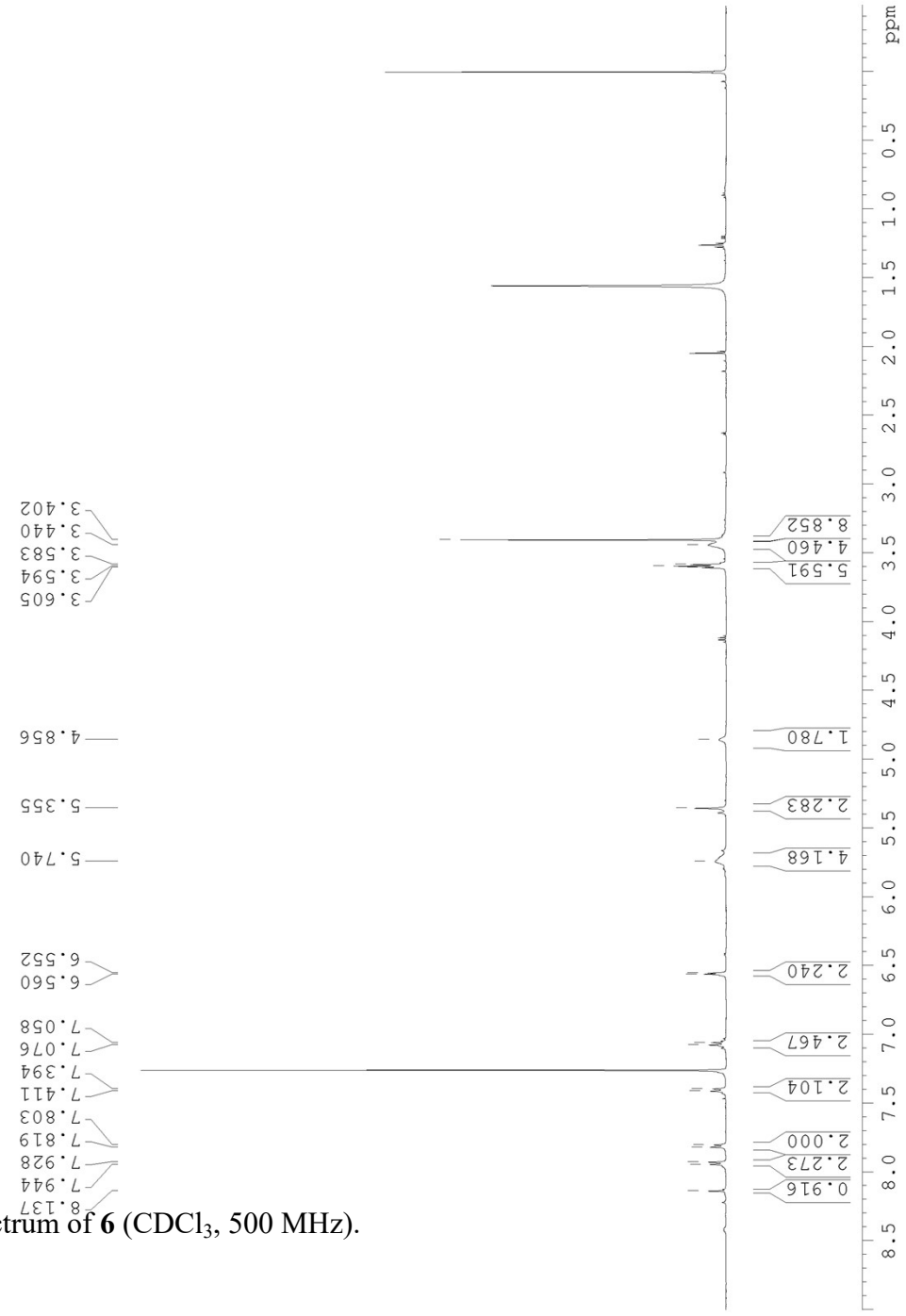


Figure S8. ^{1}H NMR spectrum of **6** ($CDCl_3$, 500 MHz).

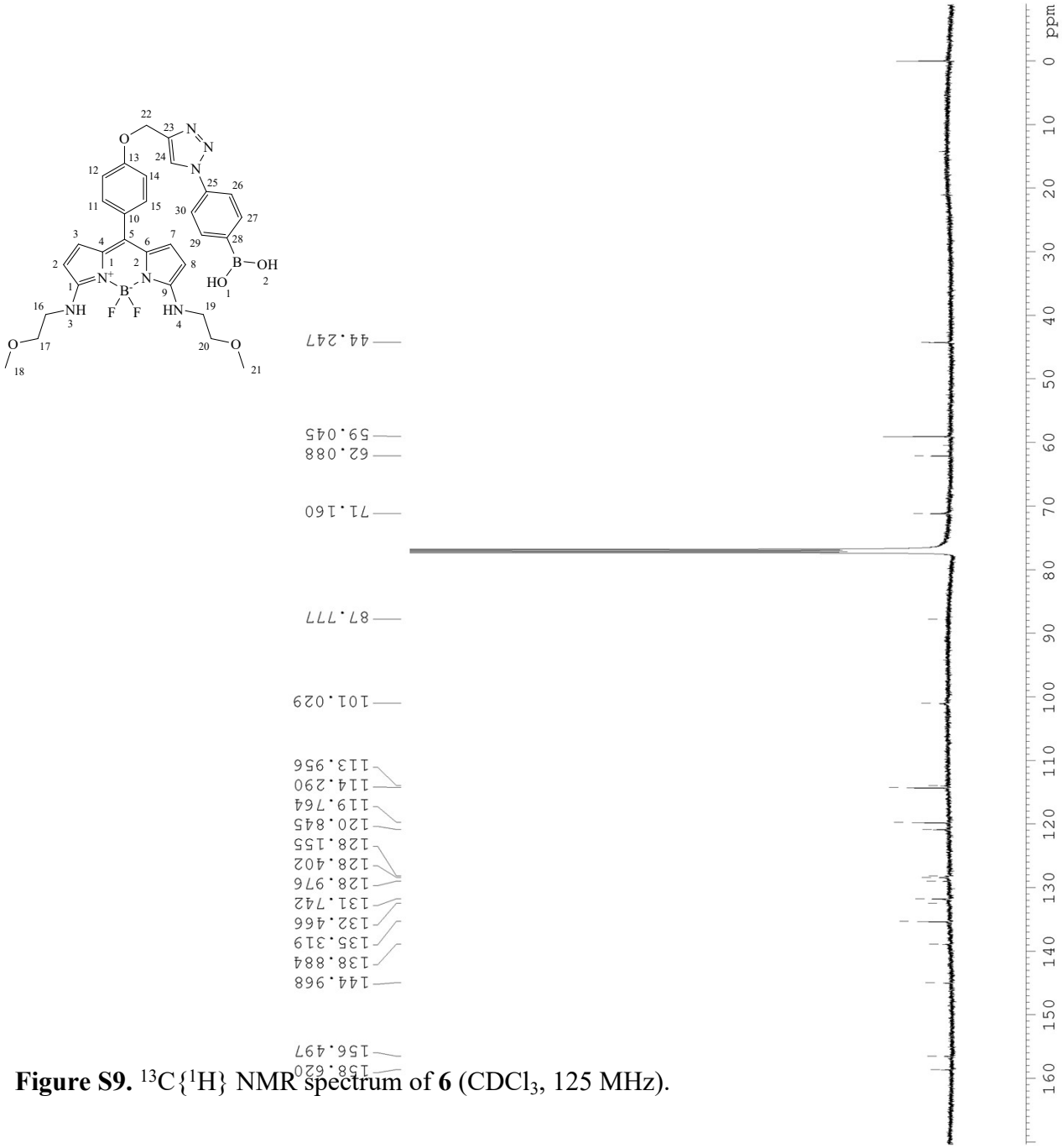


Figure S9. $^{13}C\{^{1}H\}$ NMR spectrum of **6** ($CDCl_3$, 125 MHz).

Table S1: Effect of interference substances on fructose assay

sample	$\Delta F \pm$ SE (n = 3)
2 mM D-fructose	361 ± 29
+ 1 mM uric acid	389 ± 10
+ 1 mM ascorbic acid*	424 ± 15
+ 0.5%(v/v) ethanol	375 ± 7
+ 0.5 mg/mL hen egg lysozyme	383 ± 10
+ 0.5 mg/mL chicken ovalbumin*	892 ± 13

*ANOVA followed by Dunnett's test showed that the changes after the addition of interference substances are statistically significant ($P < 0.05$).