

Supporting Information

Synthesis, Selected Transformations, and Biological Activity of Alkoxy Analogues of Lepidilines A and C

Content:

- Copies of ^1H and ^{13}C NMR spectra of synthesized compounds S2–S27
- Copies of DEPT and HMQC spectra of selected compounds S28–S31

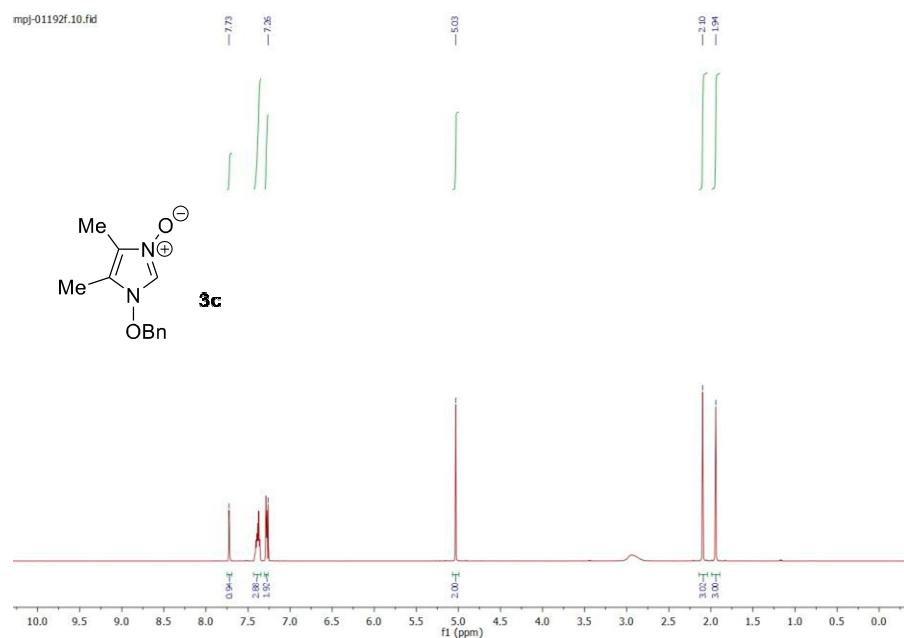


Figure S1. ^1H NMR of **3c** (CDCl_3 , 600 MHz).

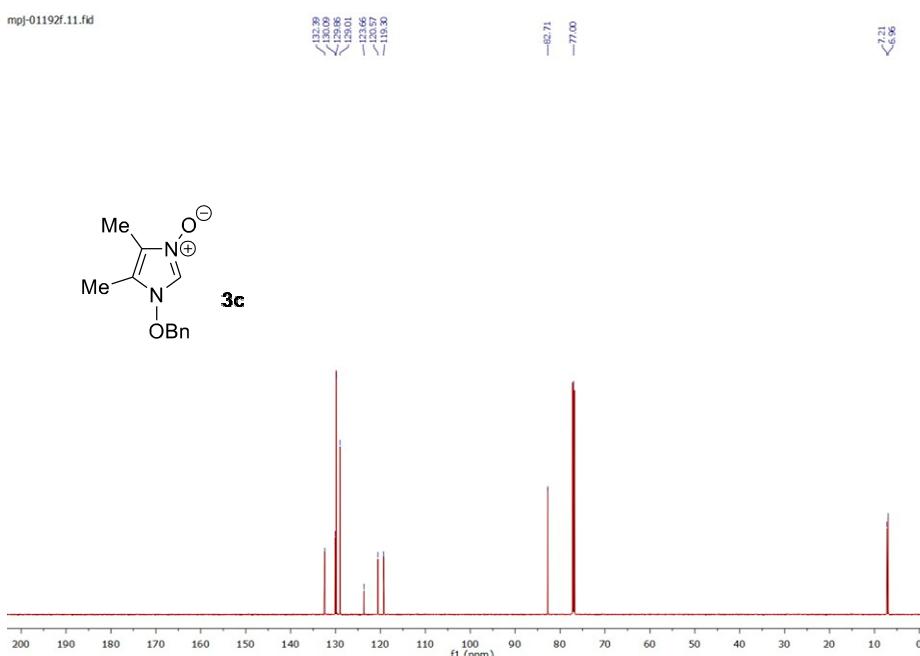


Figure S2. ^{13}C NMR of **3c** (CDCl_3 , 151 MHz).

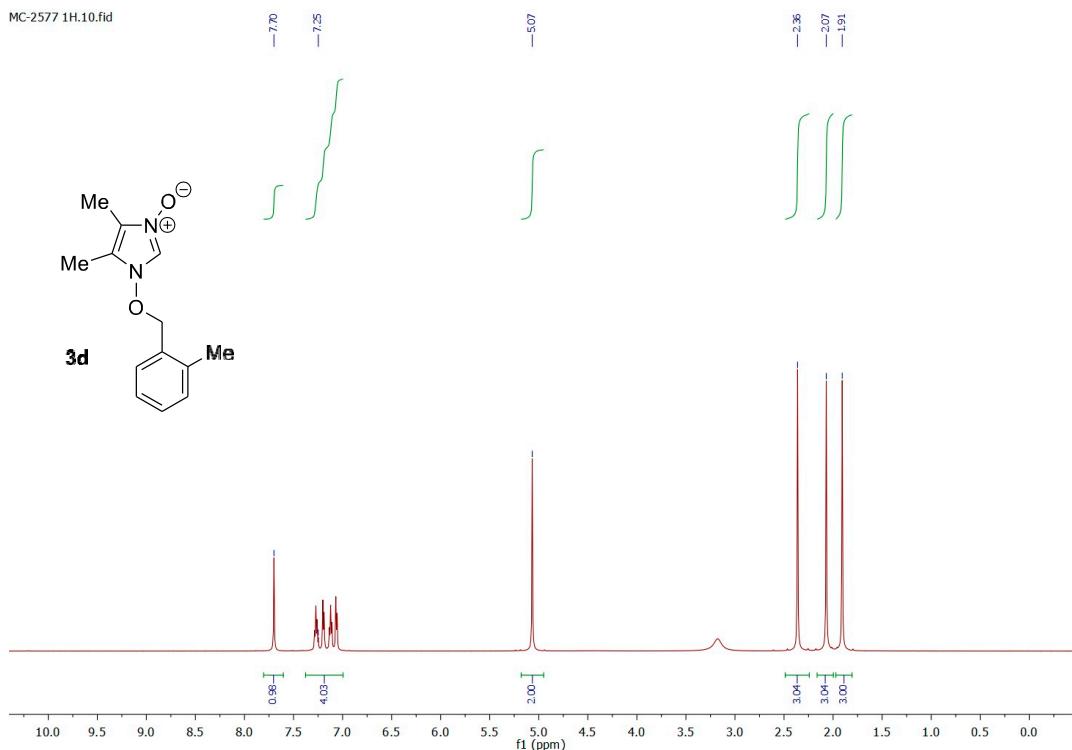


Figure S3. ^1H NMR of **3d** (CDCl_3 , 600 MHz).

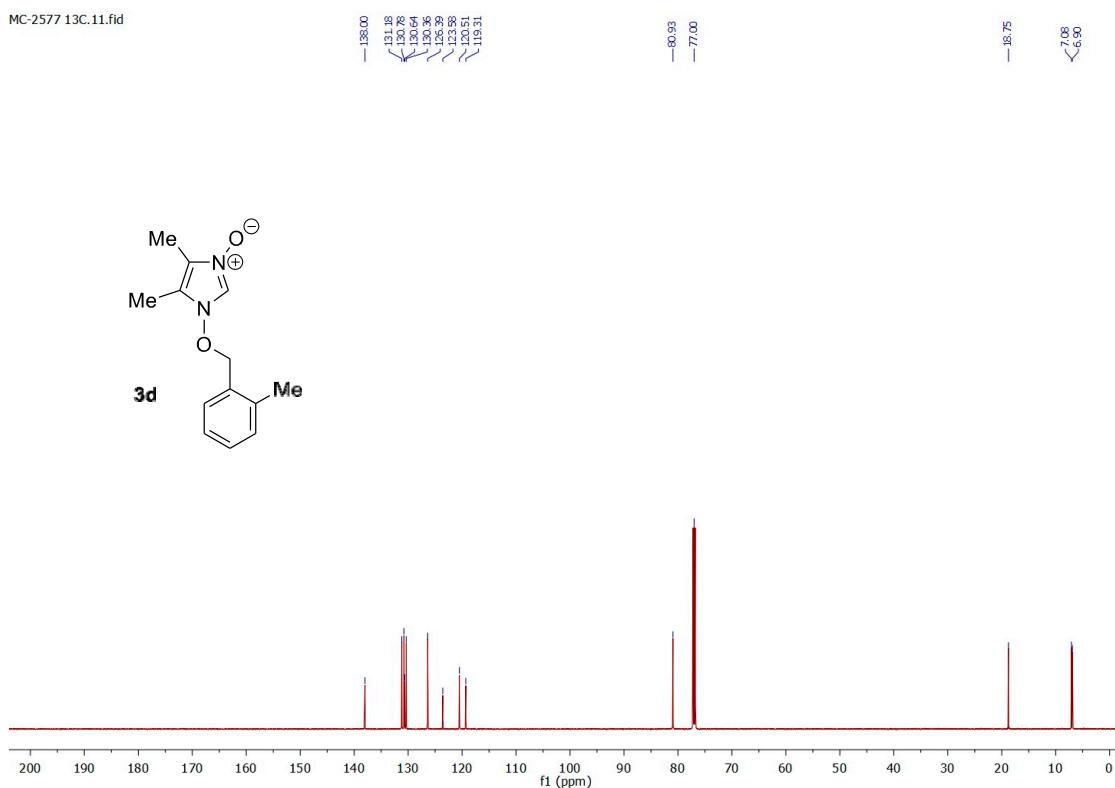


Figure S4. ^{13}C NMR of **3d** (CDCl_3 , 151 MHz).

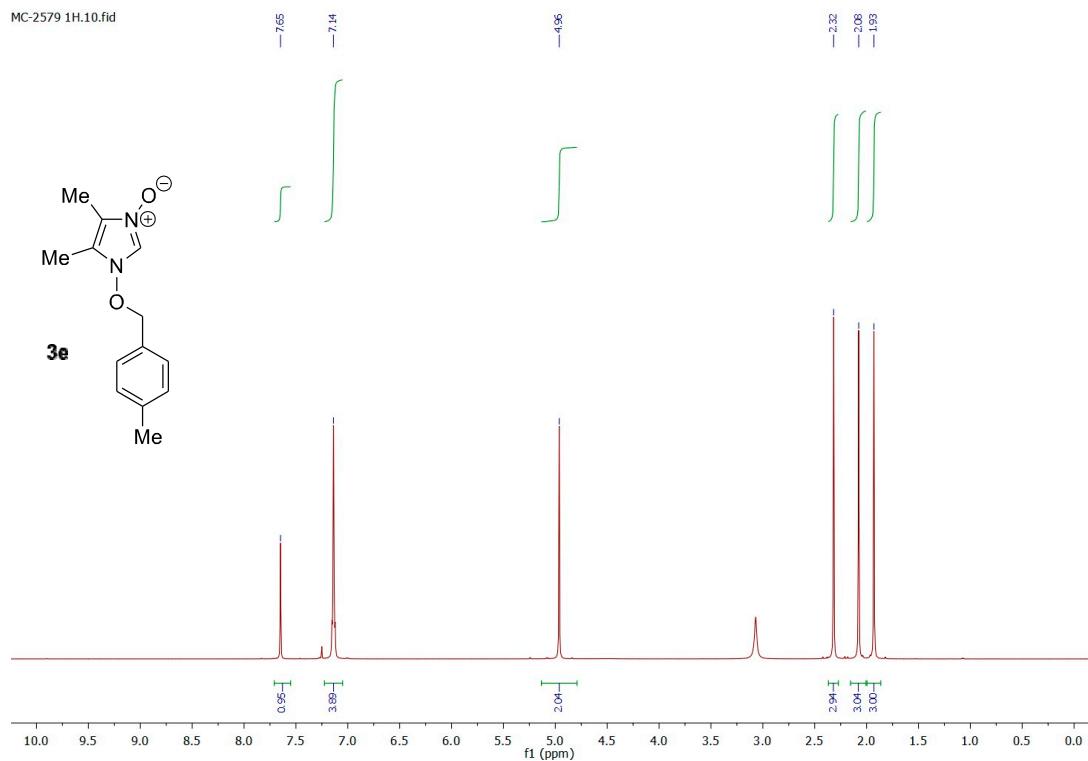


Figure S5. ^1H NMR of **3e** (CDCl_3 , 600 MHz).

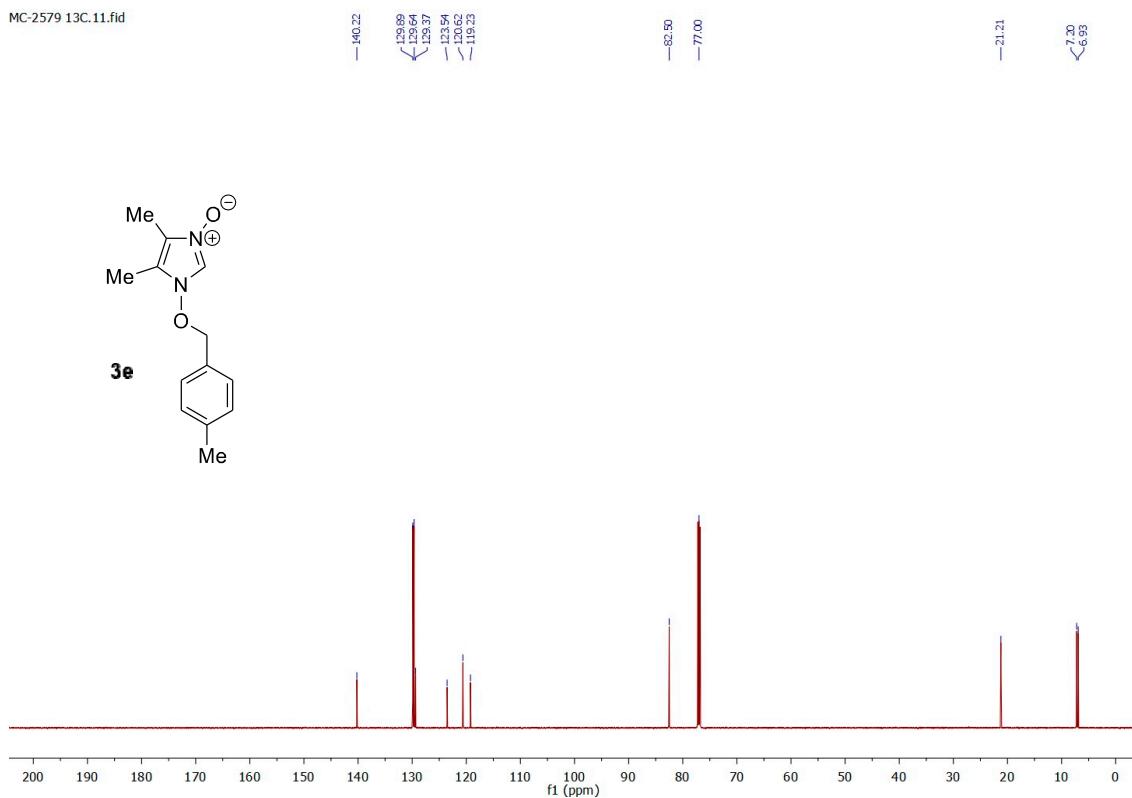
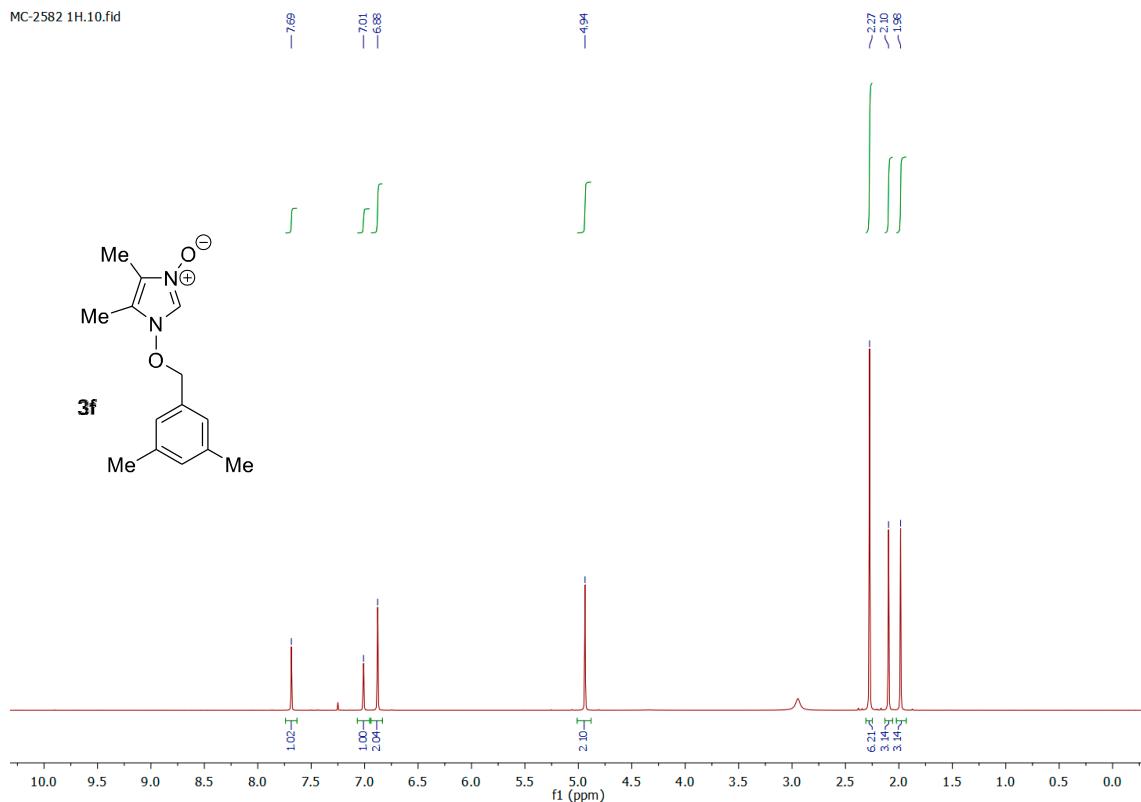
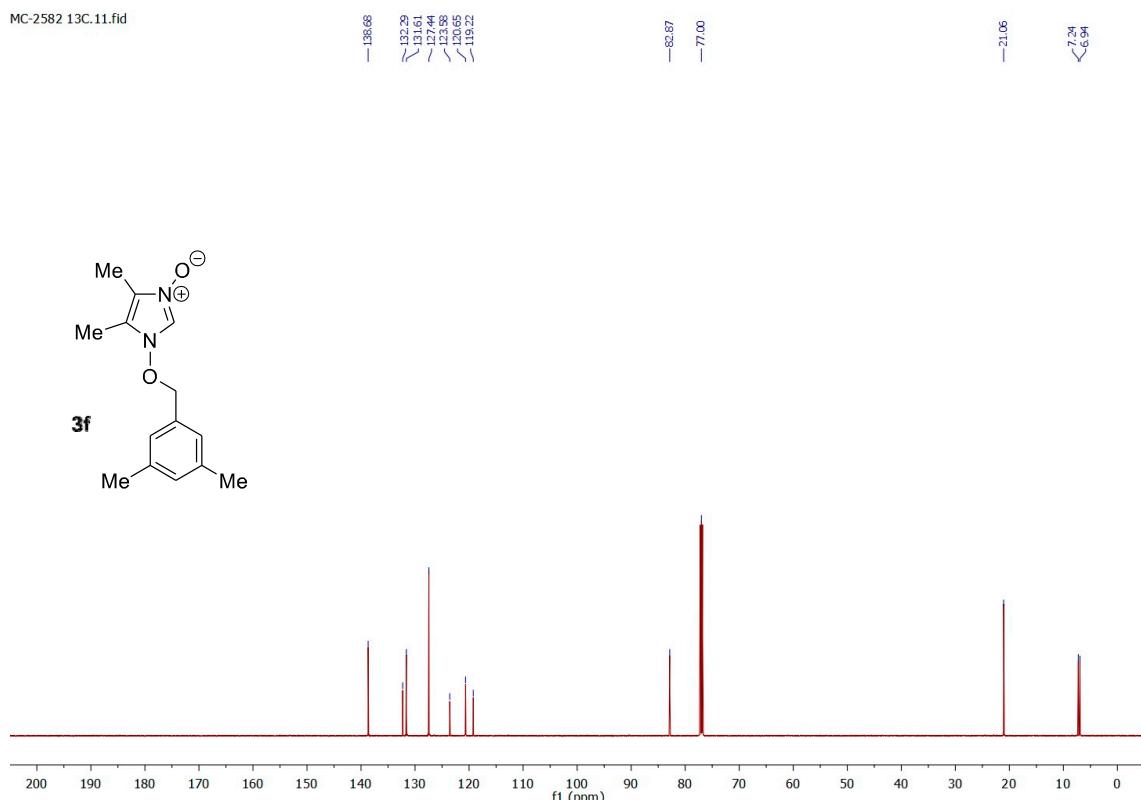


Figure S6. ^{13}C NMR of **3e** (CDCl_3 , 151 MHz).

**Figure S7.** ^1H NMR of **3f** (CDCl_3 , 600 MHz).**Figure S8.** ^{13}C NMR of **3f** (CDCl_3 , 151 MHz).

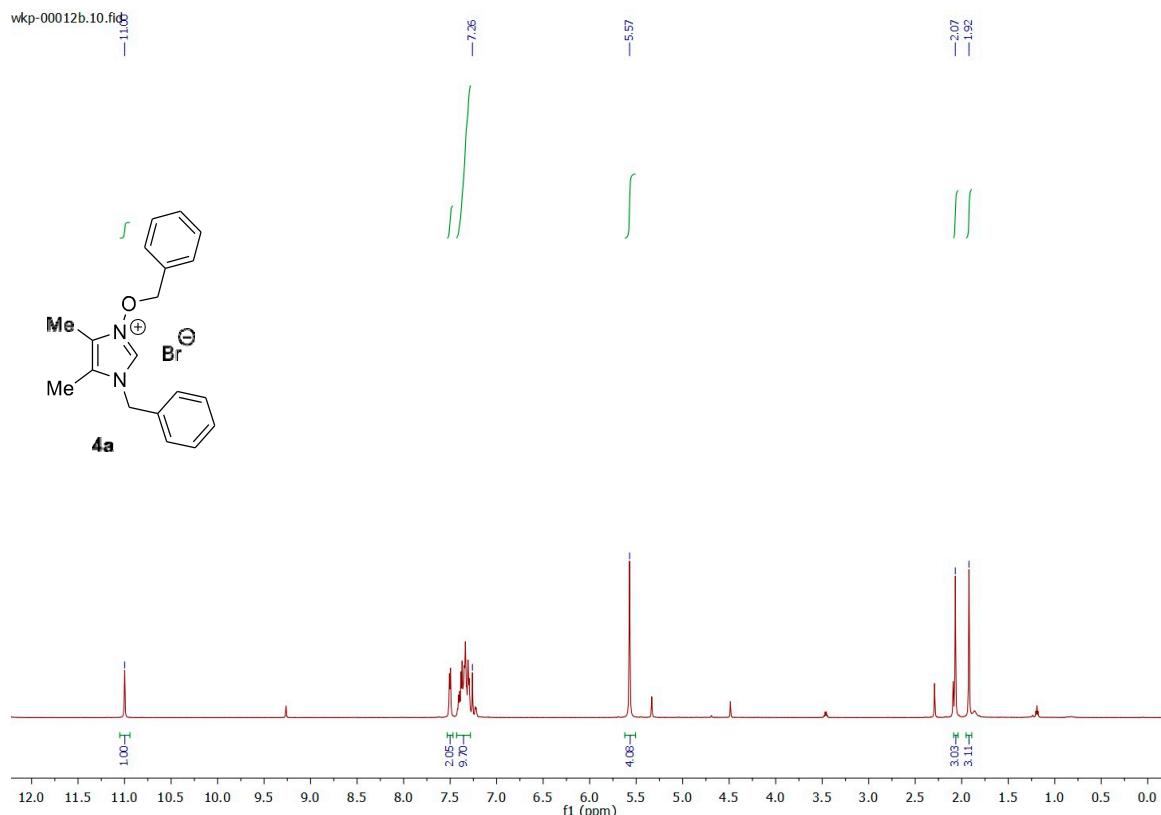


Figure S9. ^1H NMR of **4a** (CDCl_3 , 600 MHz).

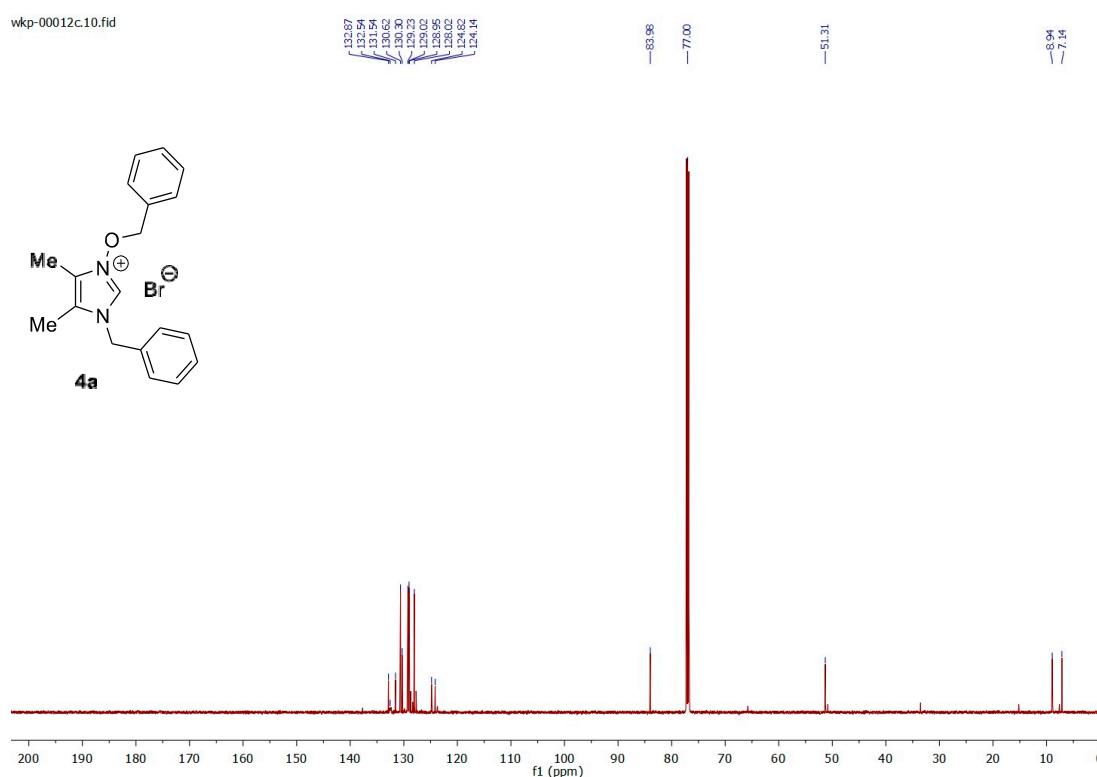
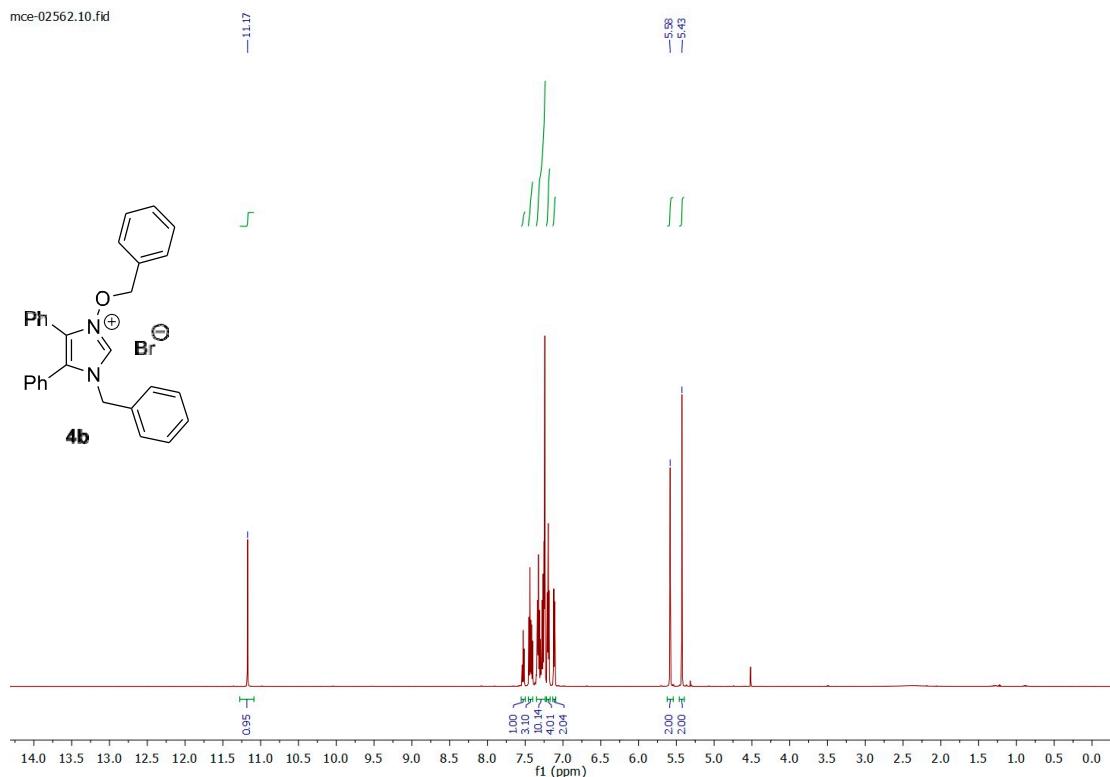
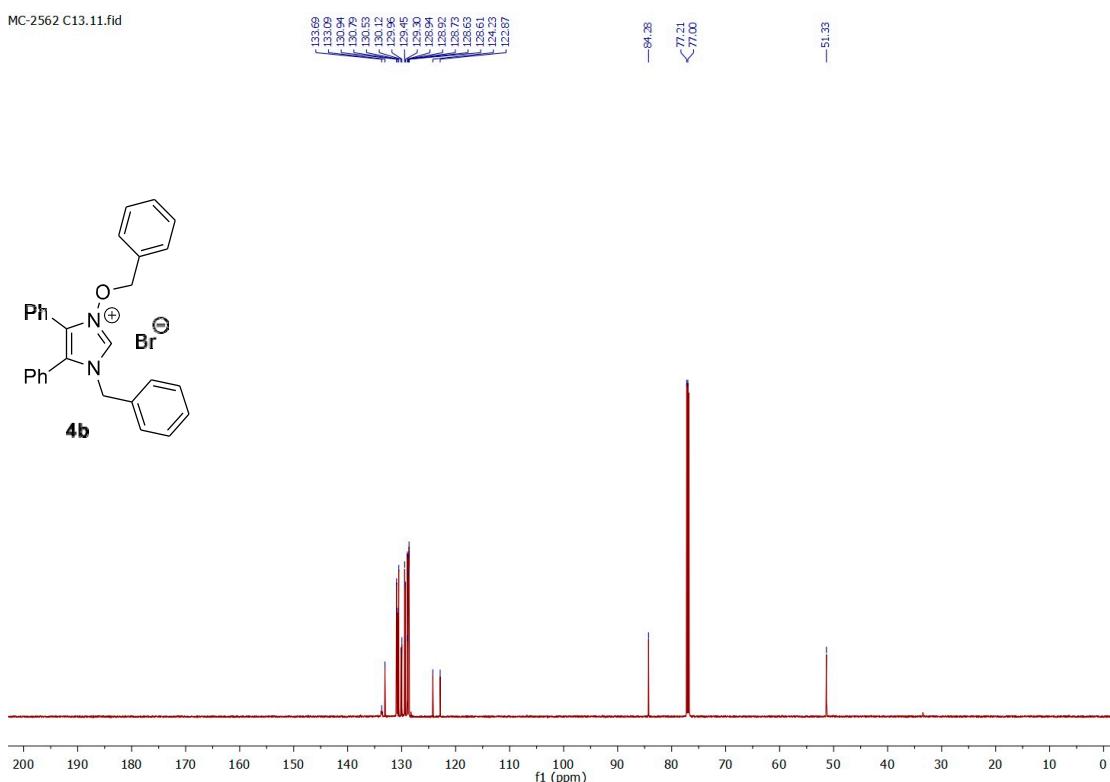


Figure S10. ^{13}C NMR of **4a** (CDCl_3 , 151 MHz).

**Figure S11.** ¹H NMR of **4b** (CDCl₃, 600 MHz).**Figure S12.** ¹³C NMR of **4b** (CDCl₃, 151 MHz).

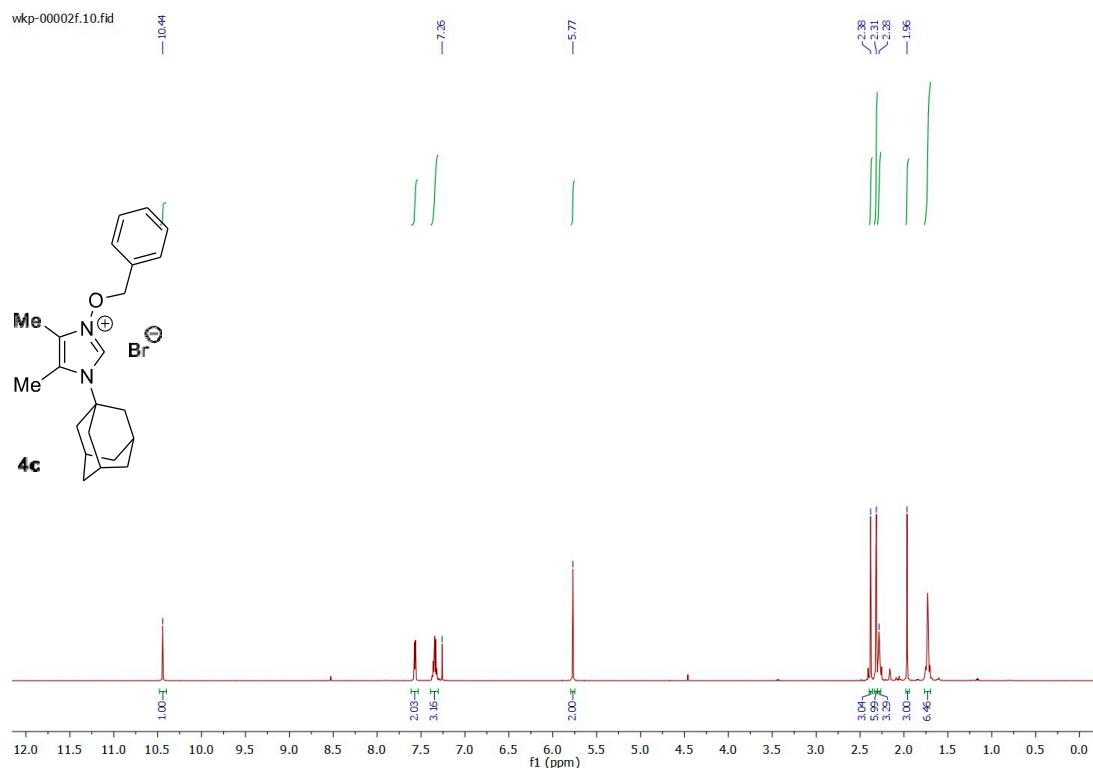


Figure S13. ^1H NMR of **4c** (CDCl_3 , 600 MHz).

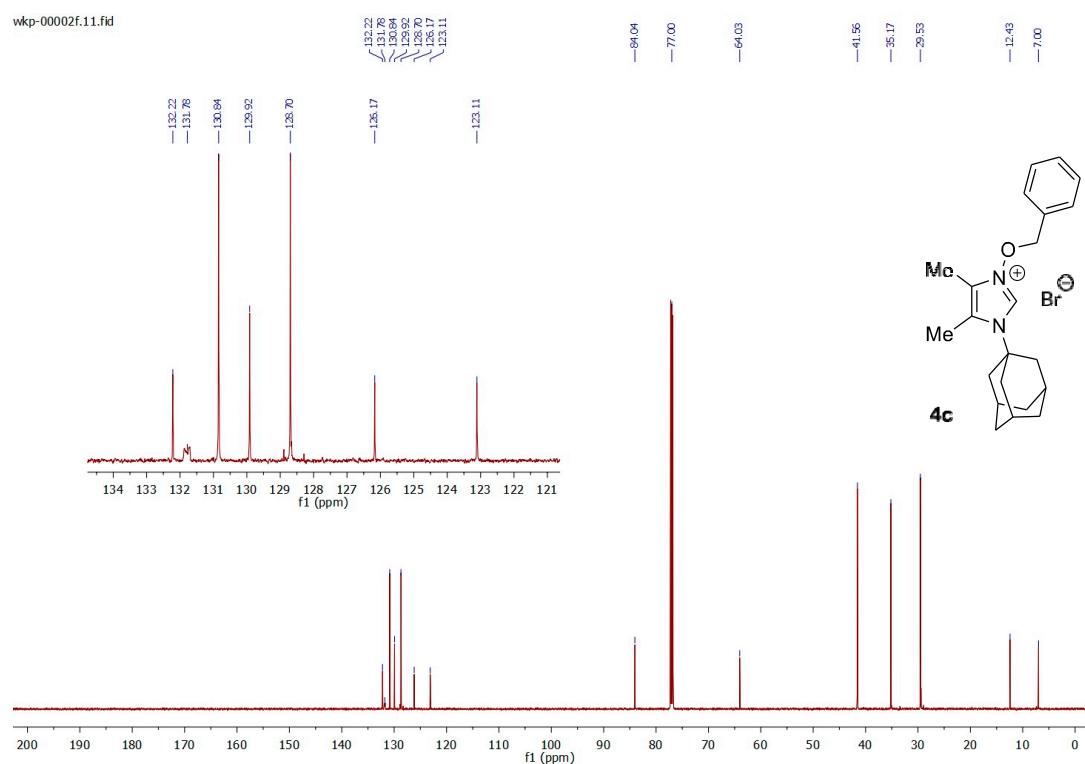


Figure S14. ^{13}C NMR of **4c** (CDCl_3 , 151 MHz).

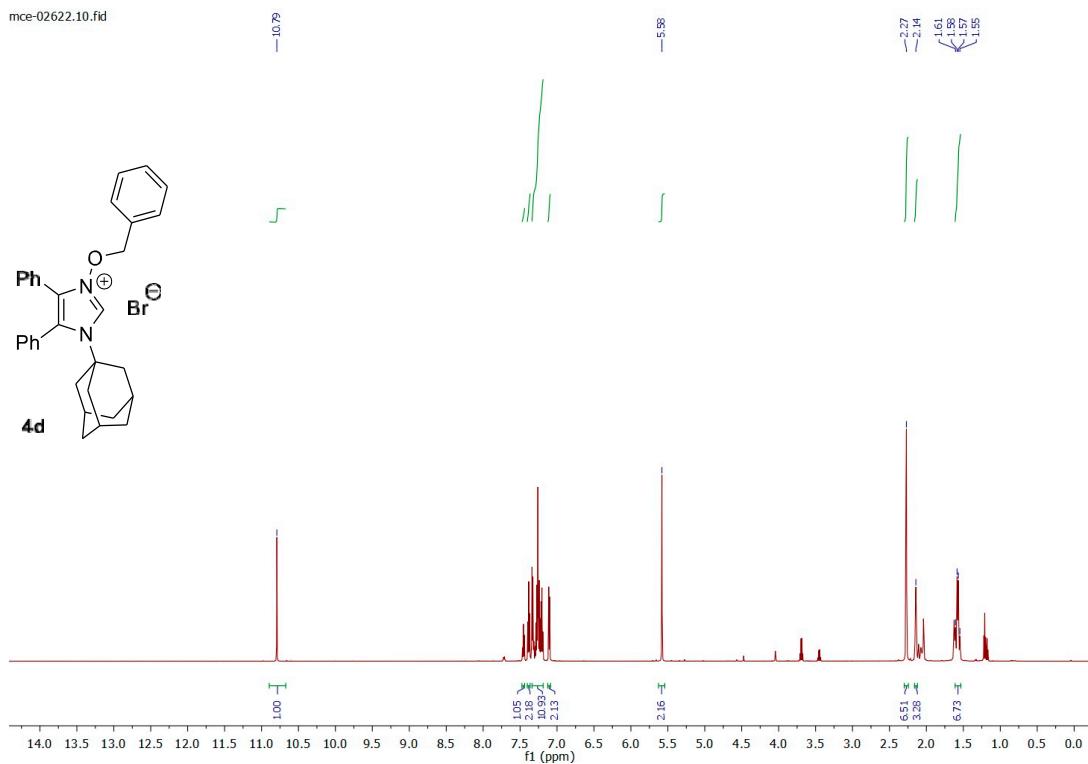


Figure S15. ^1H NMR of **4d** (CDCl_3 , 600 MHz).

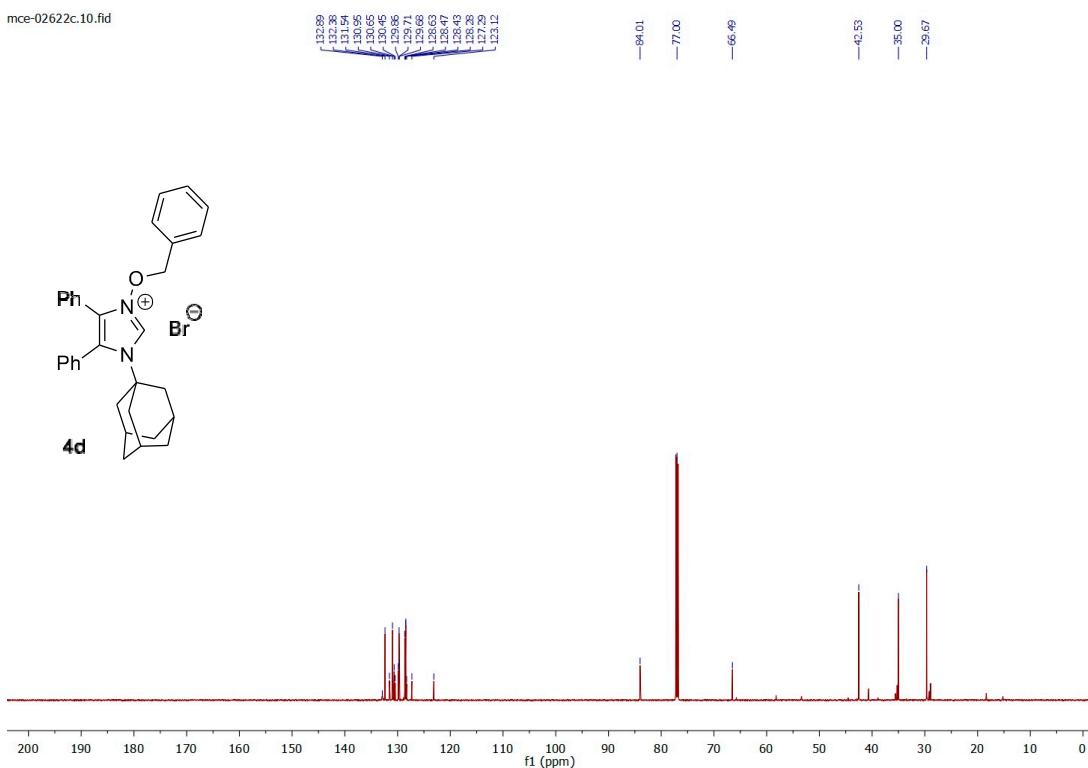


Figure S16. ^{13}C NMR of **4d** (CDCl_3 , 151 MHz).

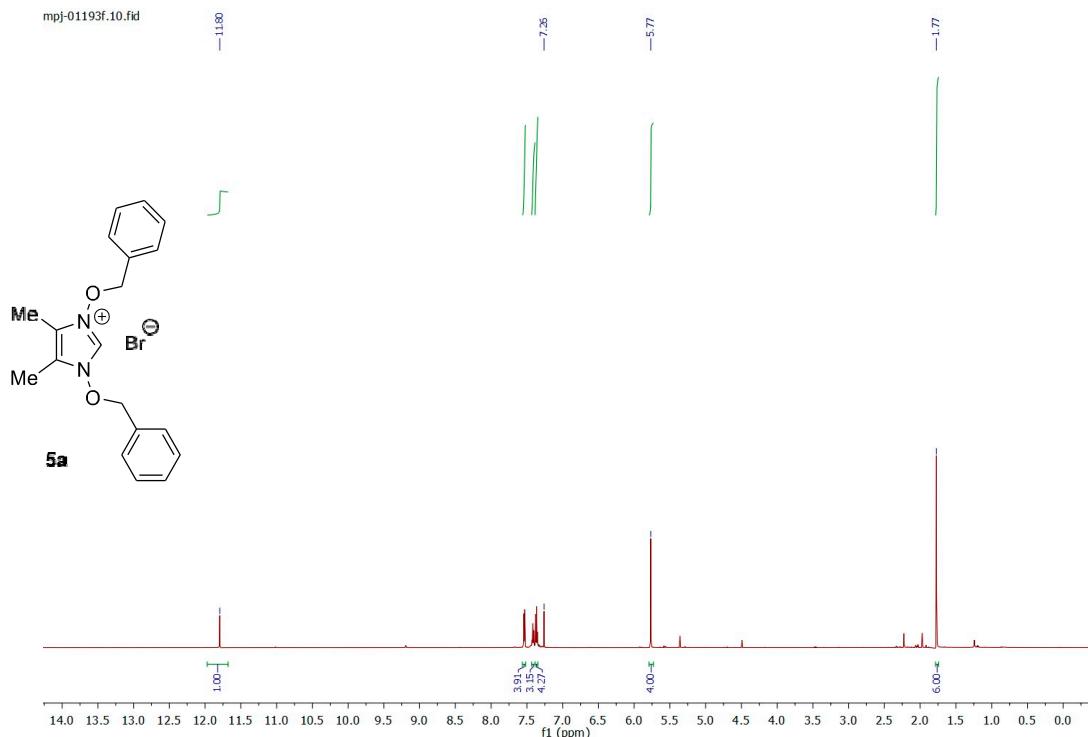


Figure S17. ^1H NMR of **5a** (CDCl_3 , 600 MHz).

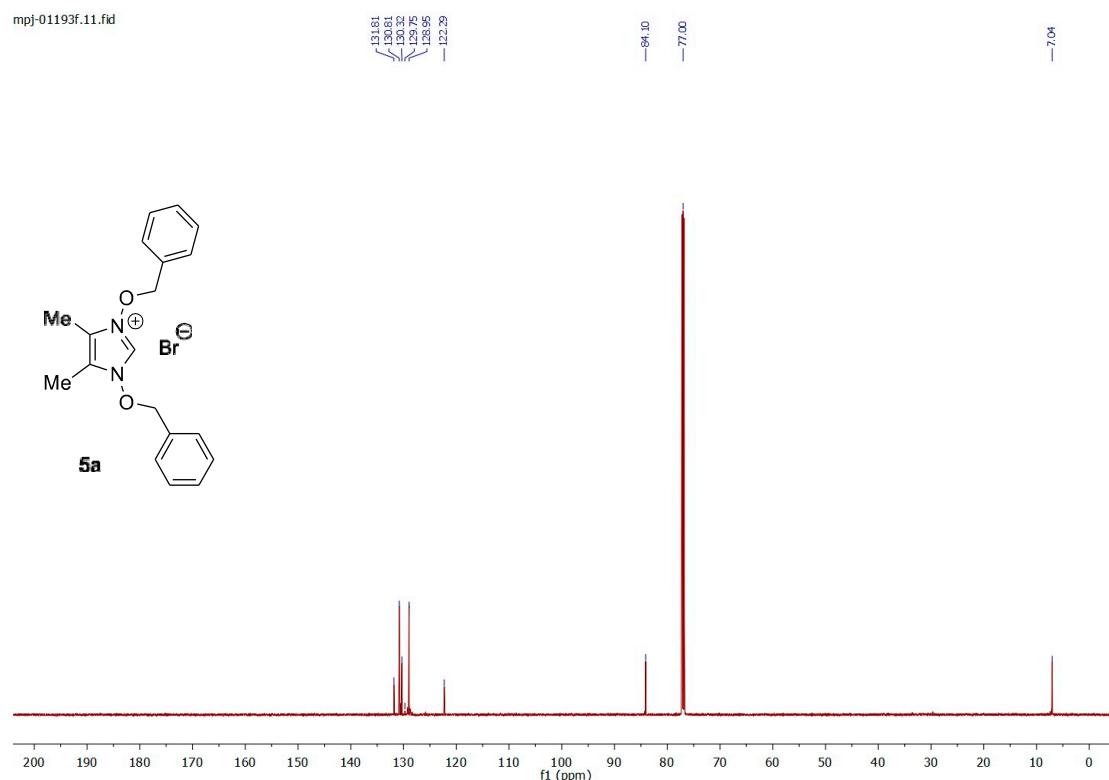
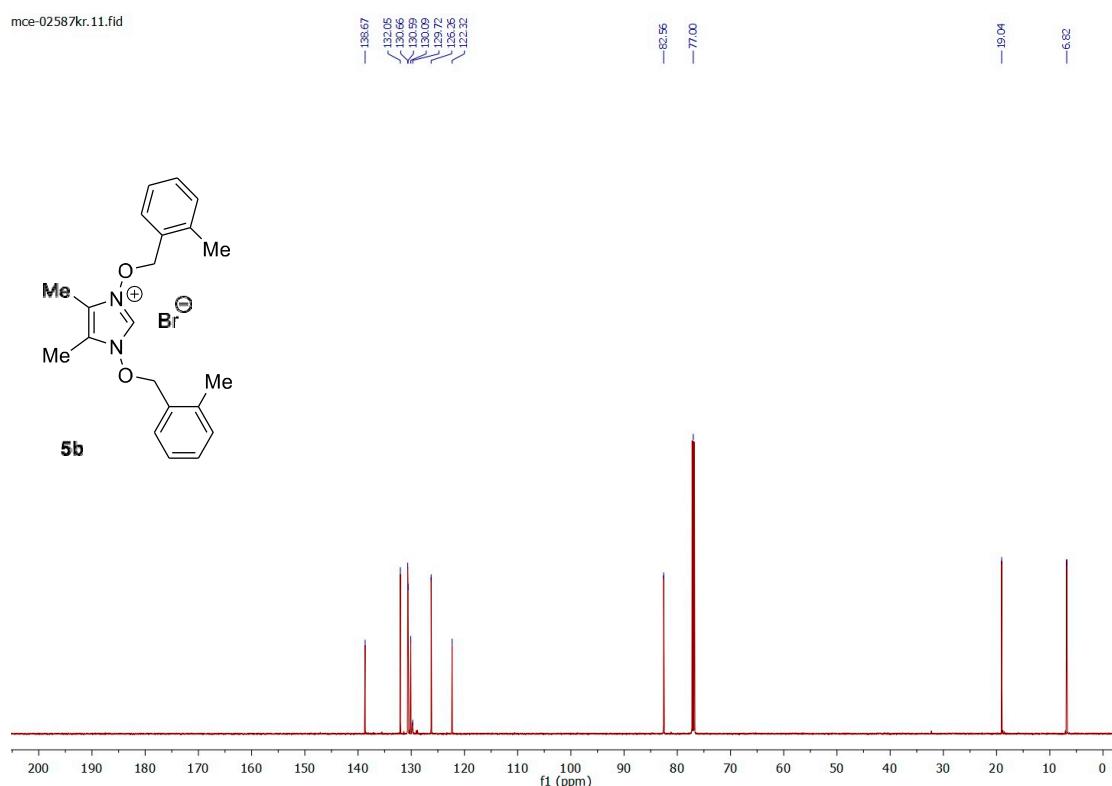
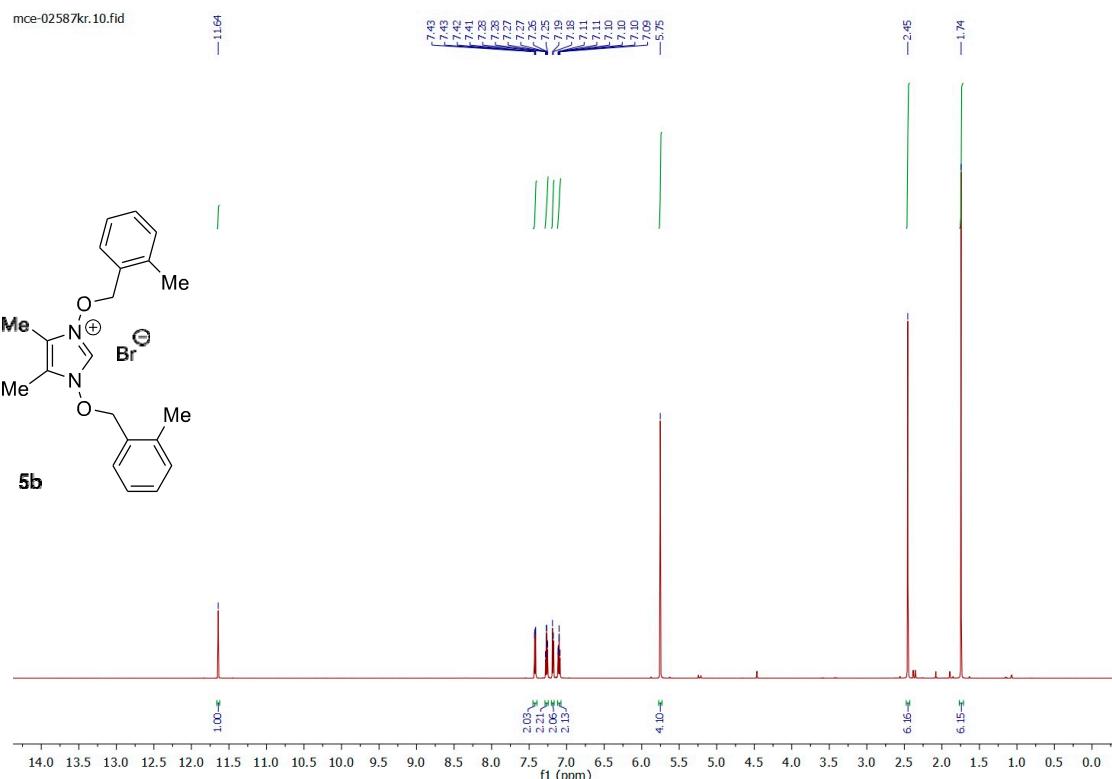
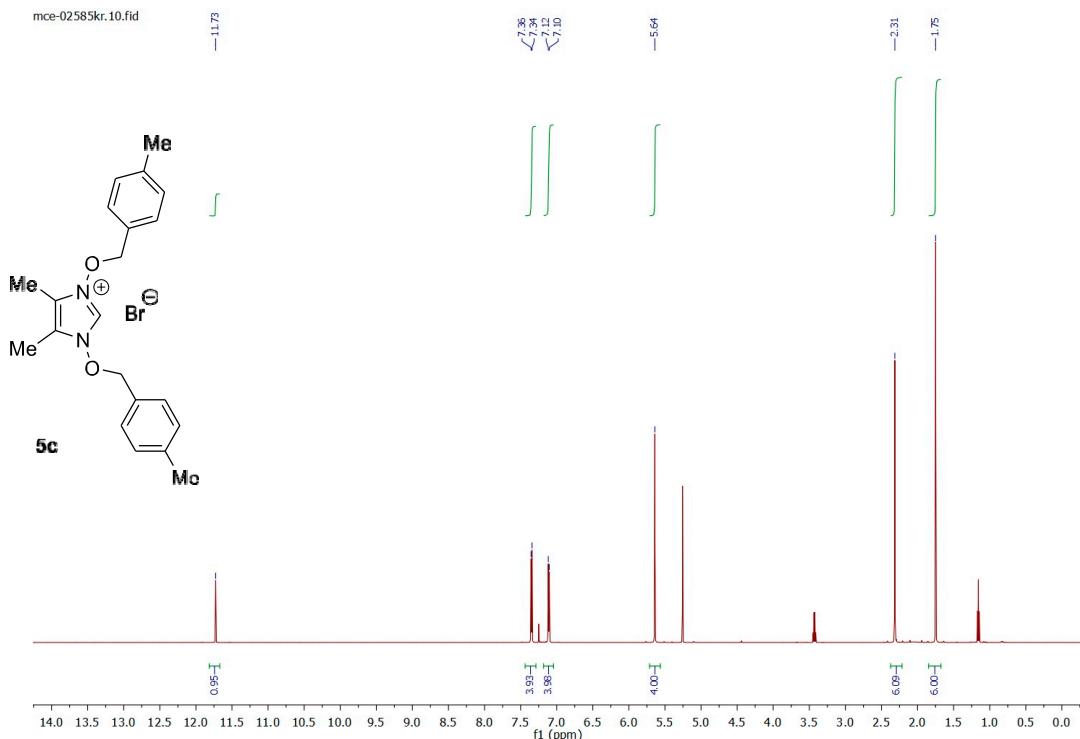
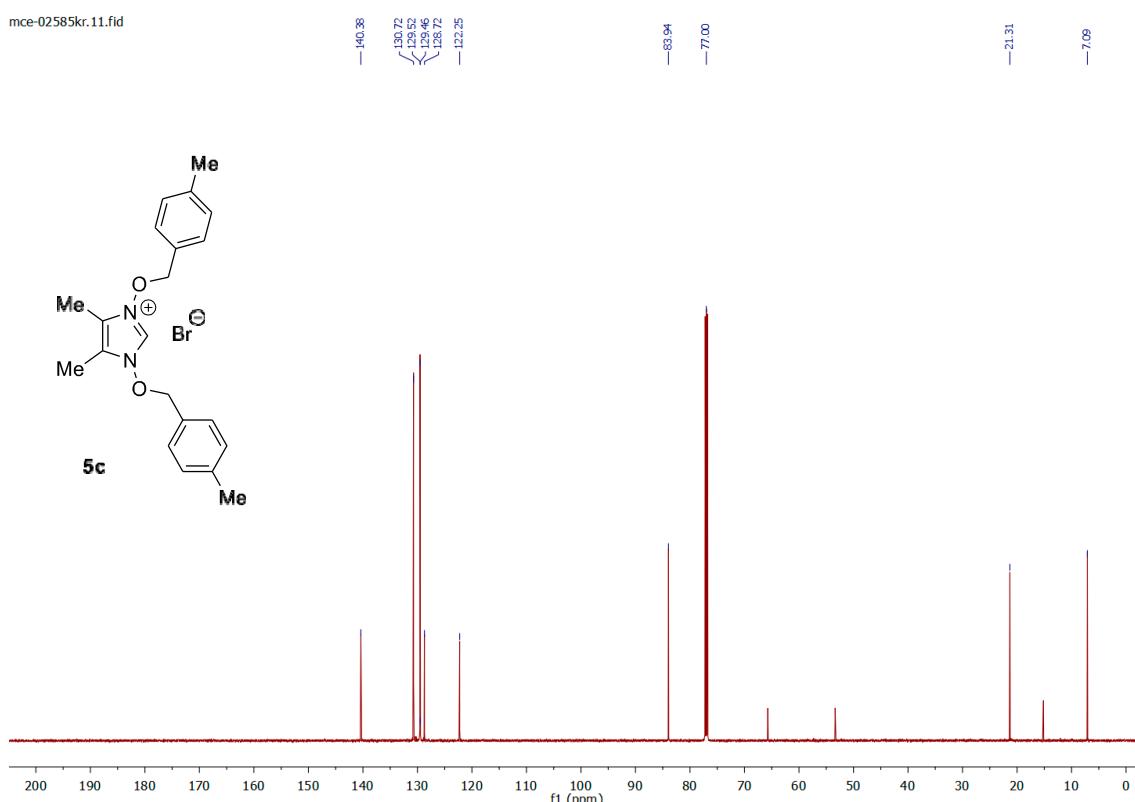
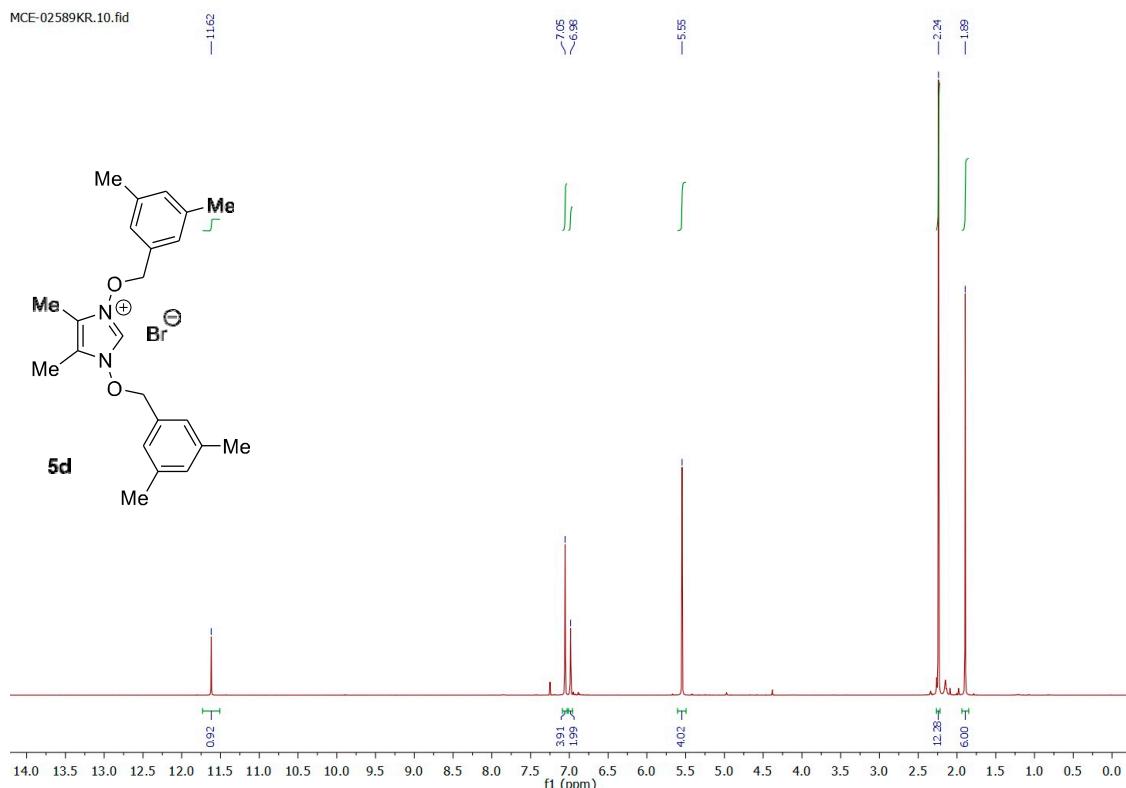
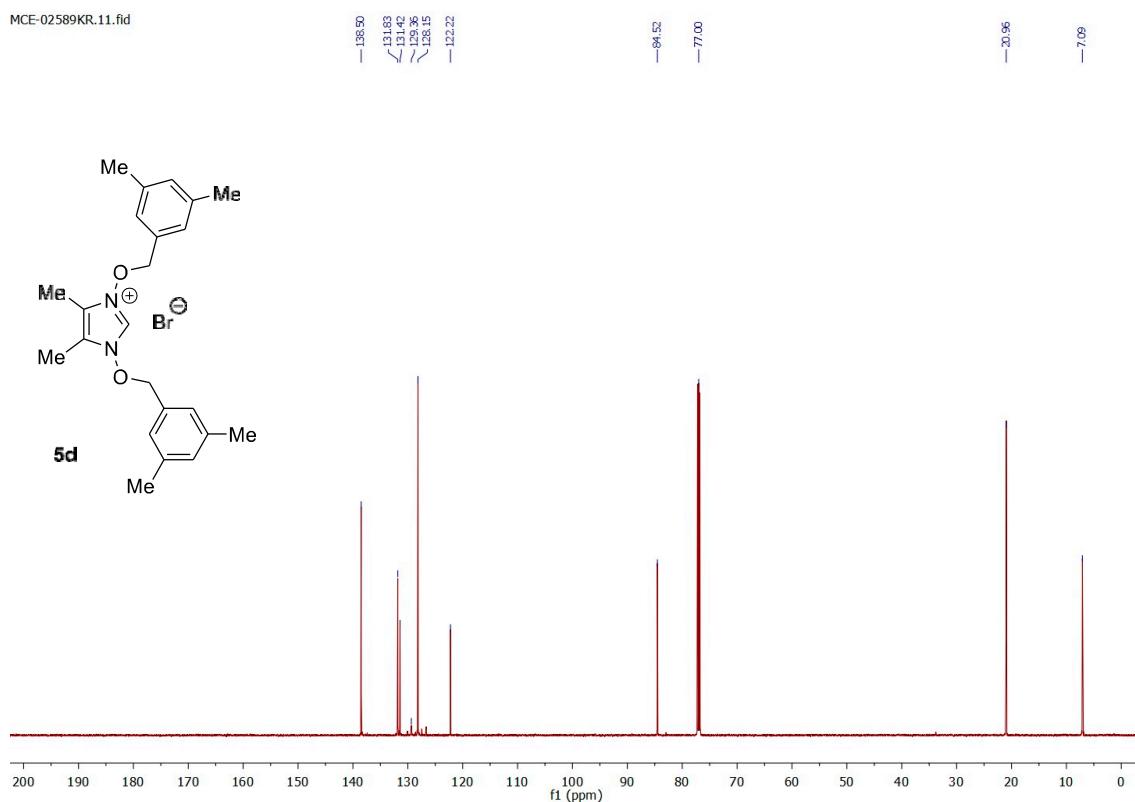


Figure S18. ^{13}C NMR of **5a** (CDCl_3 , 151 MHz).

**Figure S20.** ^{13}C NMR of **5b** (CDCl_3 , 151 MHz).

**Figure S21.** ^1H NMR of **5c** (CDCl_3 , 600 MHz).**Figure S22.** ^{13}C NMR of **5c** (CDCl_3 , 151 MHz).

**Figure S23.** ¹H NMR of **5d** (CDCl₃, 600 MHz).**Figure S24.** ¹³C NMR of **5d** (CDCl₃, 151 MHz).

Bromide **5e** in a mixture with **5a** and **5b** (see the main text)

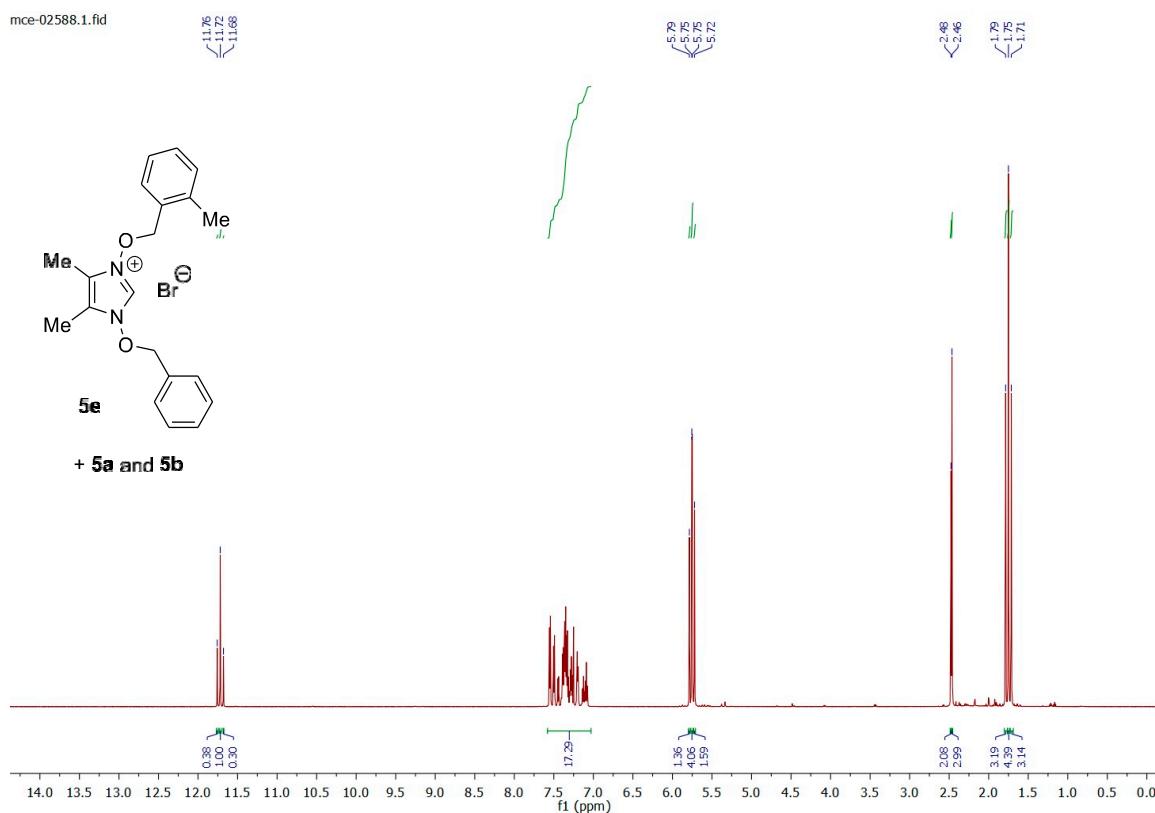


Figure S25. ^1H NMR (CDCl_3 , 600 MHz) of a mixture of **5e**, **5a** and **5b** in a ca. 4:3:10 ratio obtained by treatment of imidazole N-oxide **3d** with benzyl bromide (CH_2Cl_2 , rt, overnight).

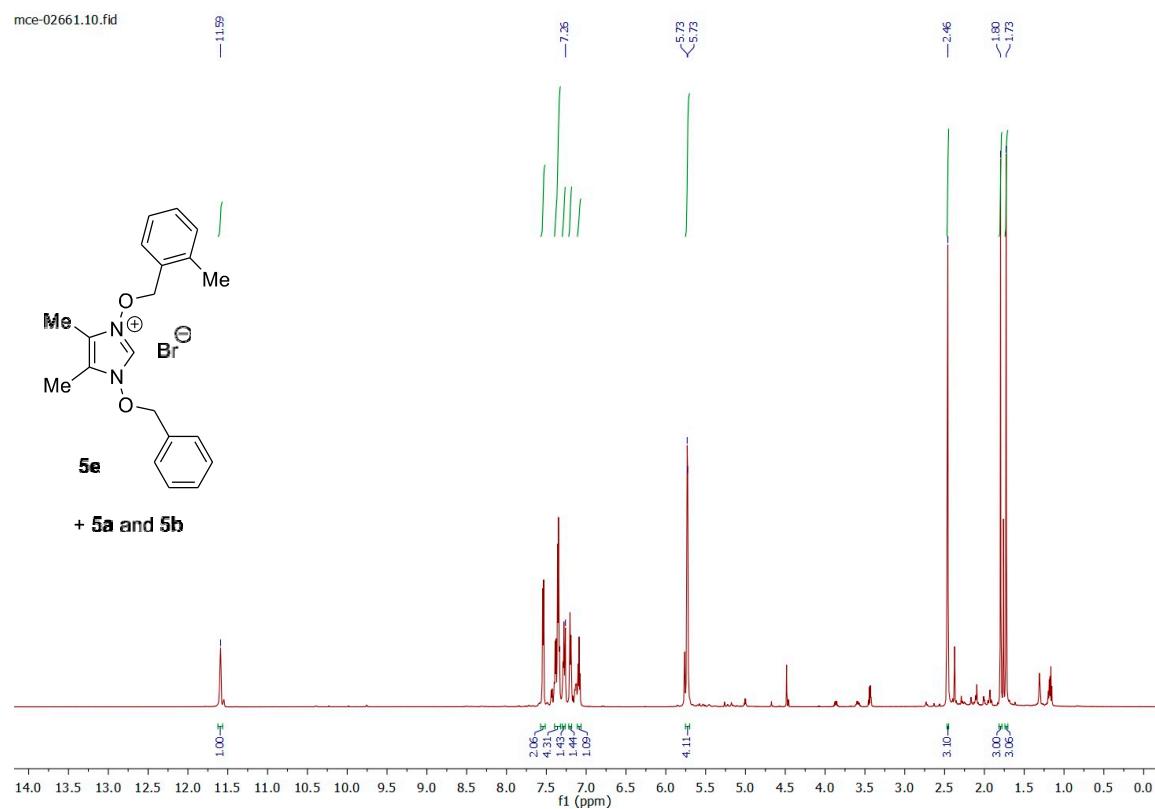


Figure S26. ^1H NMR (CDCl_3 , 600 MHz) of a mixture of **5e**, **5a** and **5b** in a ca. 20:1:1 ratio obtained by treatment of imidazole N-oxide **3c** with 2-methylbenzyl bromide (CH_2Cl_2 , rt, overnight).

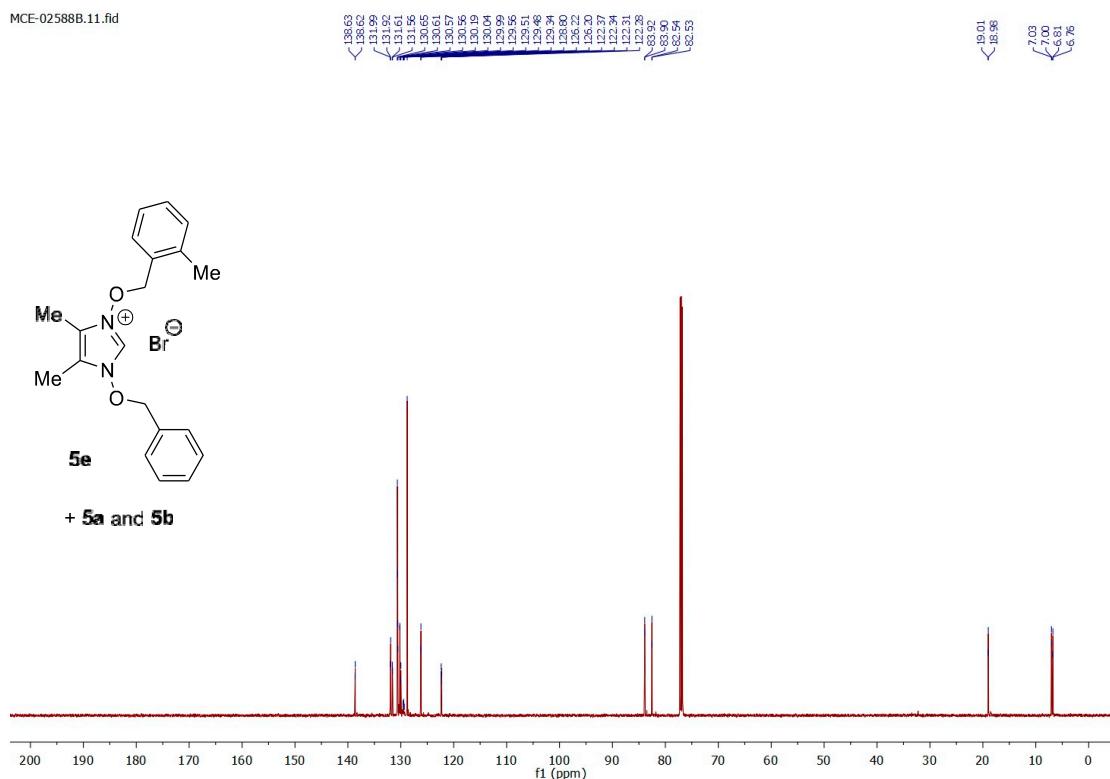


Figure S27. ^{13}C NMR of a mixture of **5e**, **5a** and **5b** in a *ca.* 4:3:10 ratio (CDCl_3 , 151 MHz).

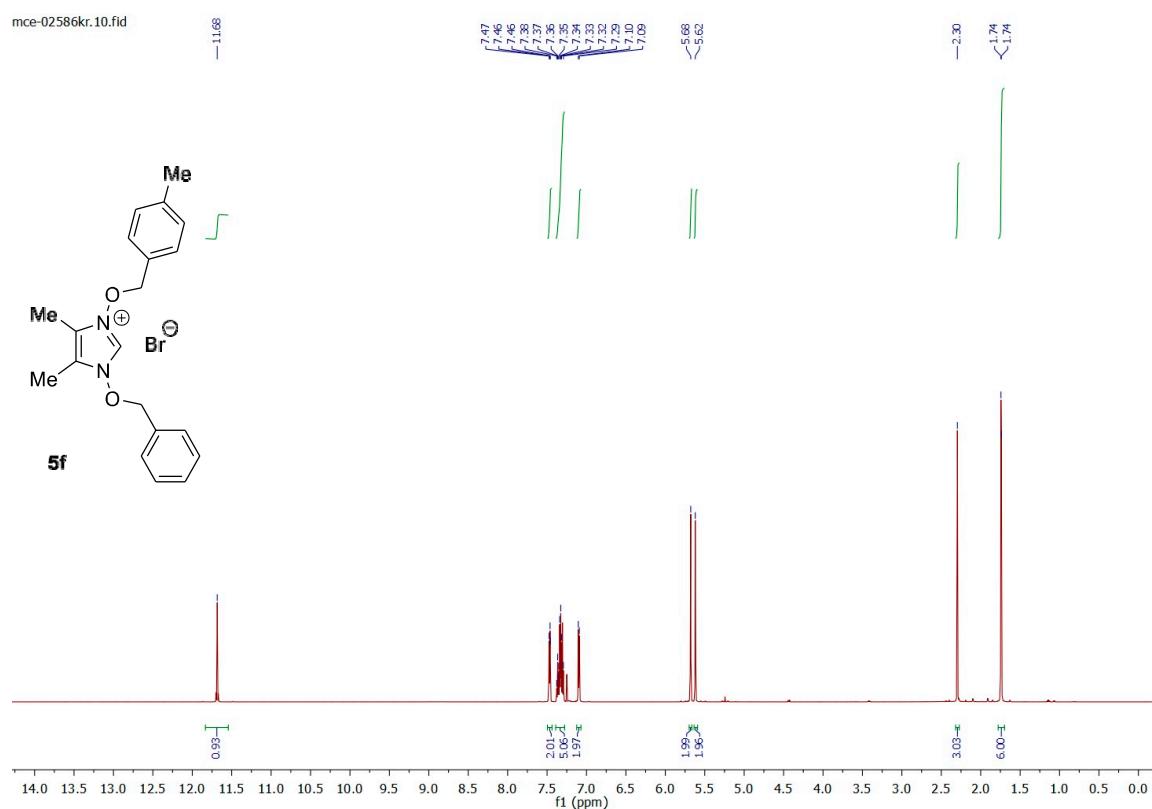
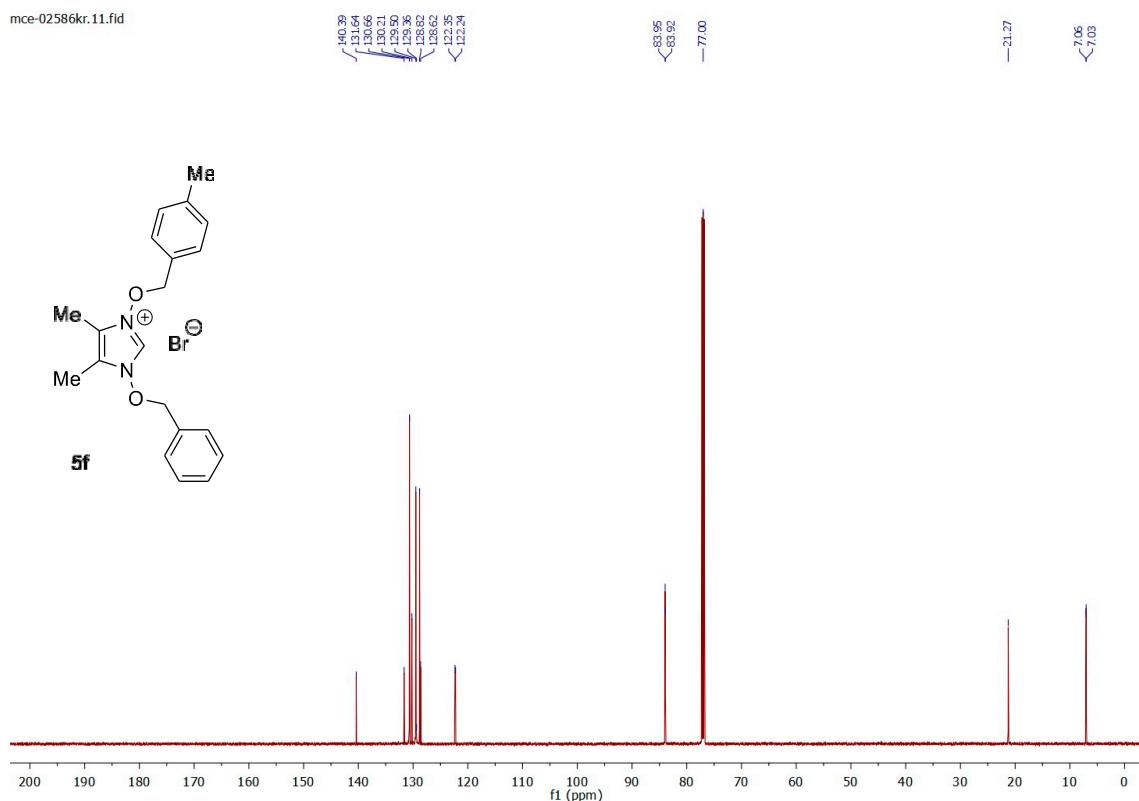
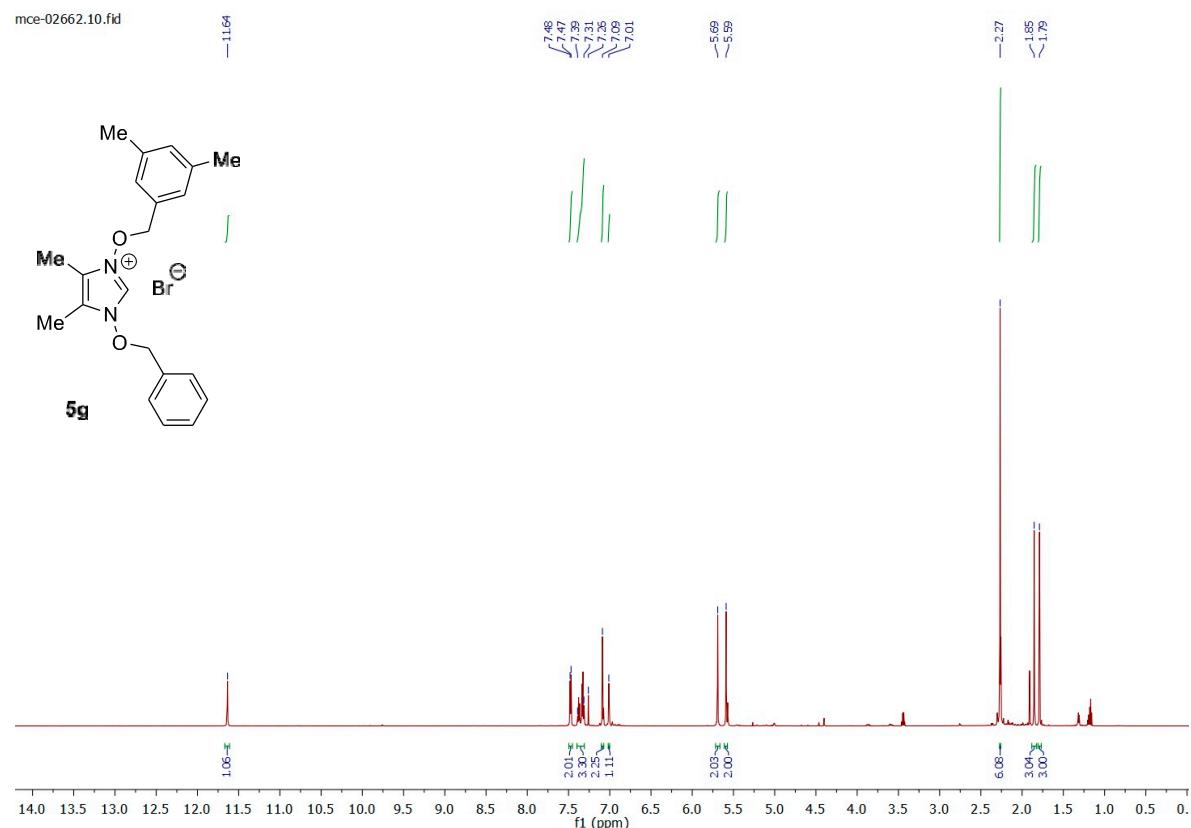
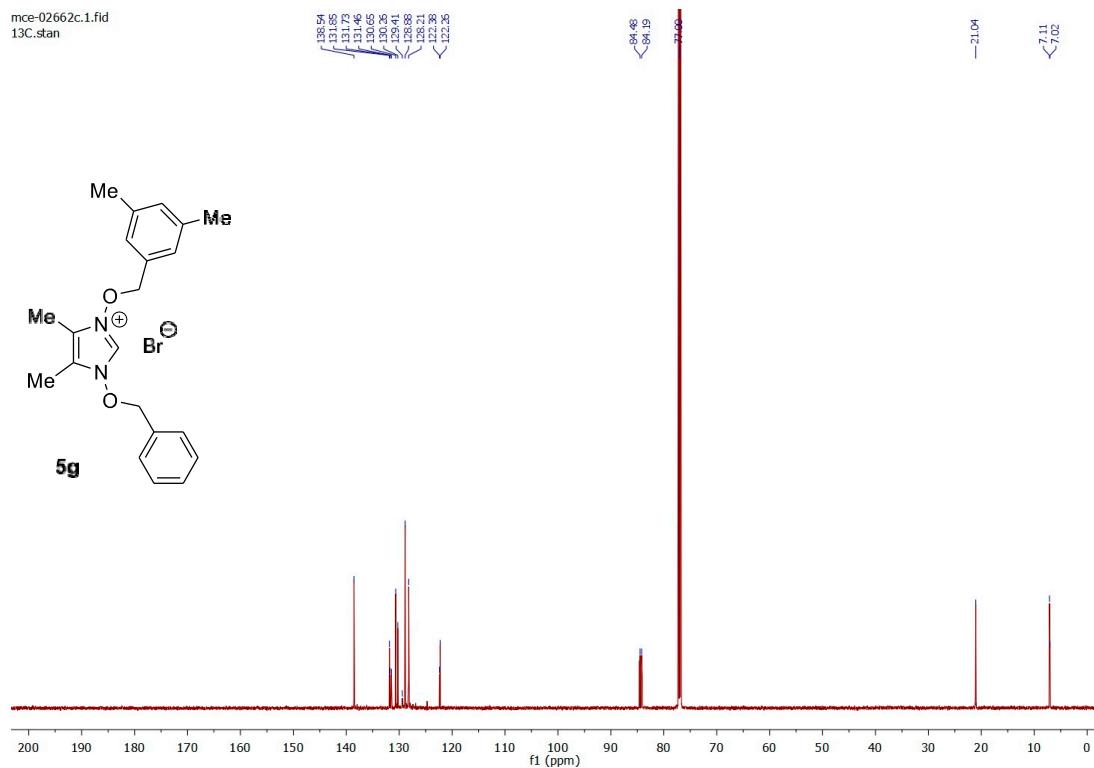
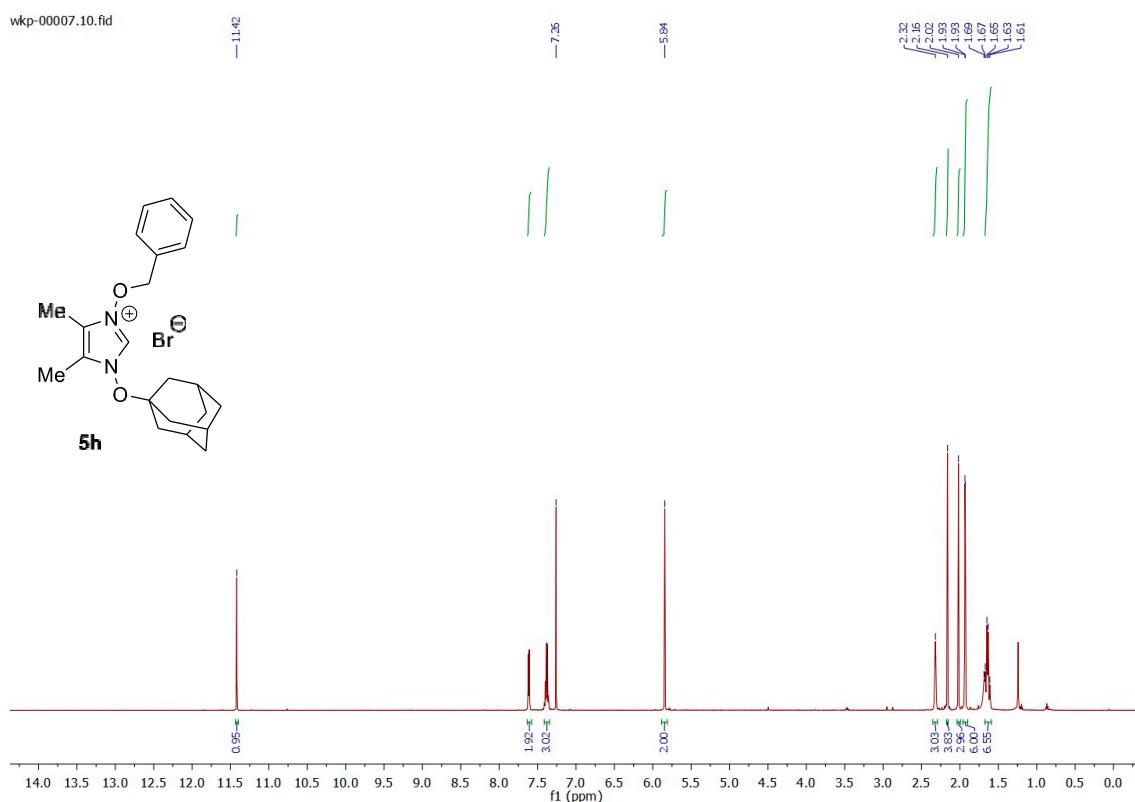


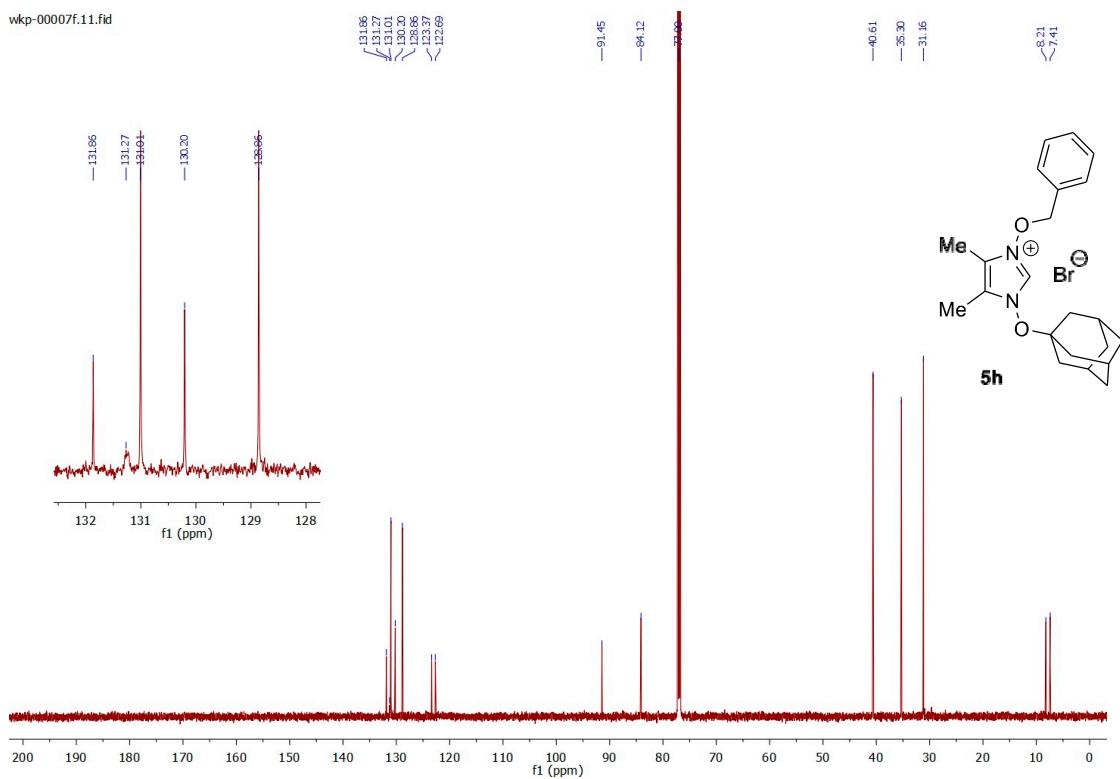
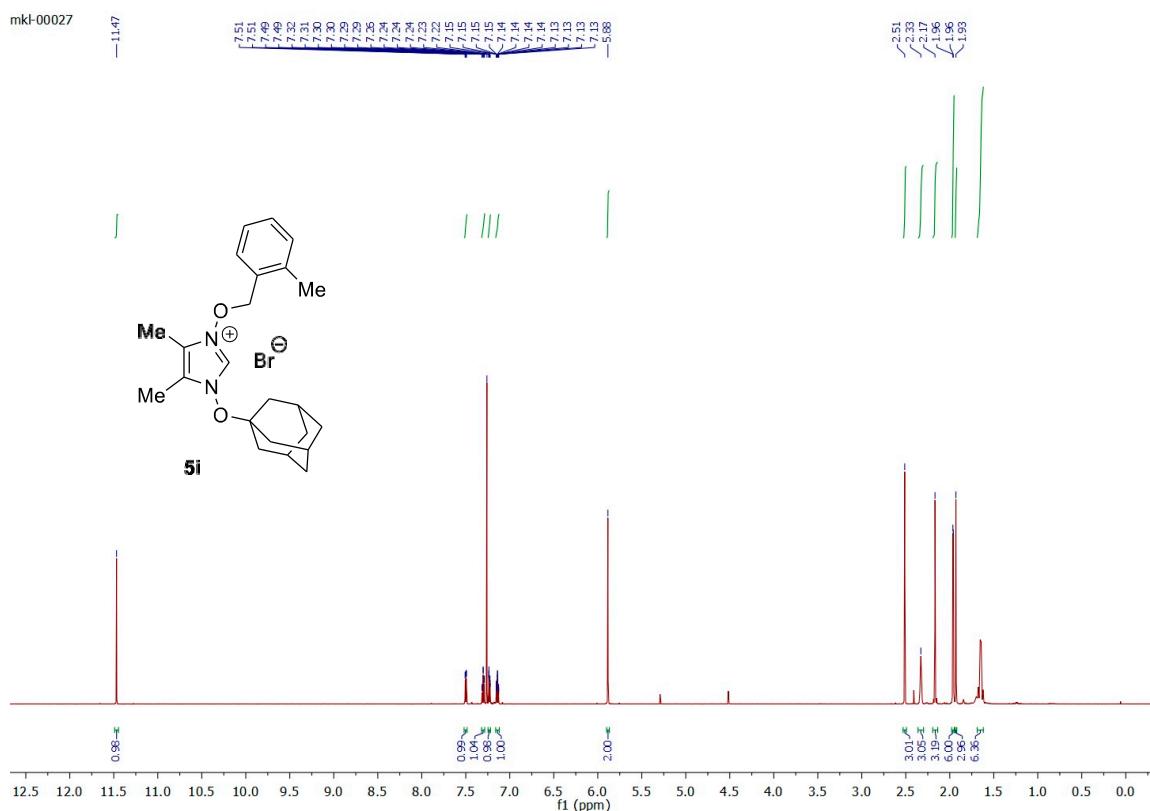
Figure S28. ^1H NMR of **5f** (CDCl_3 , 600 MHz).

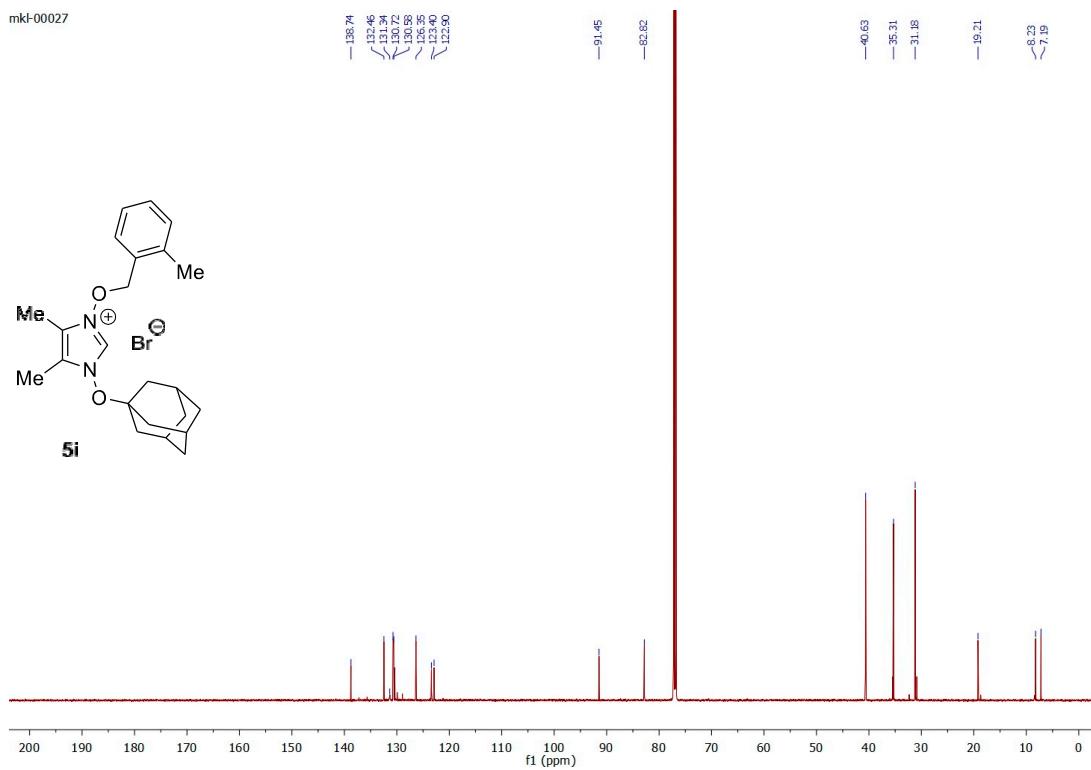
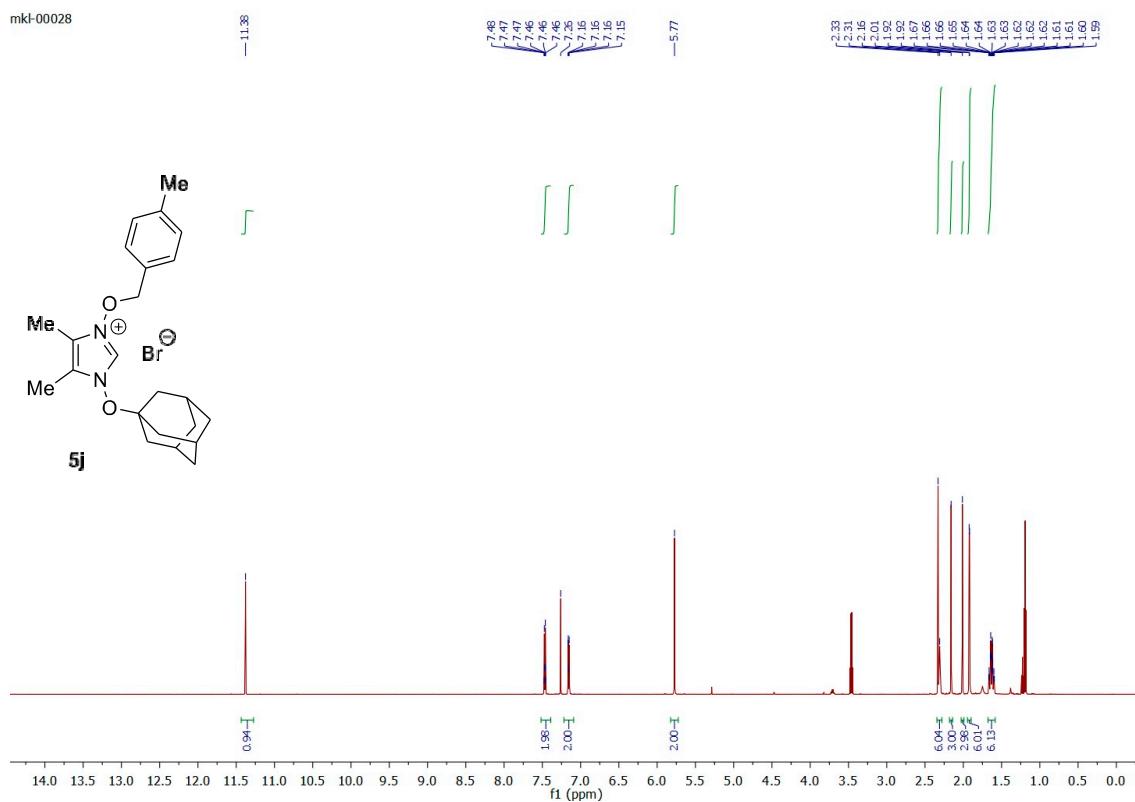
**Figure S29.** ^{13}C NMR of **5f** (CDCl_3 , 151 MHz)..

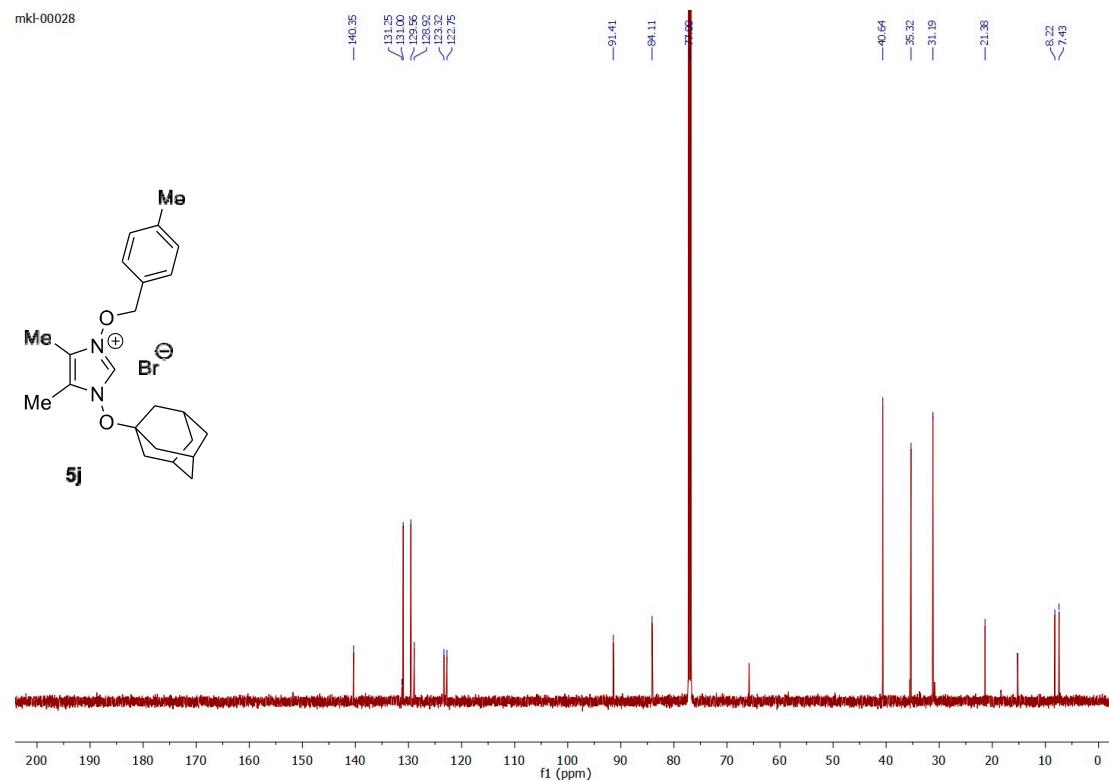
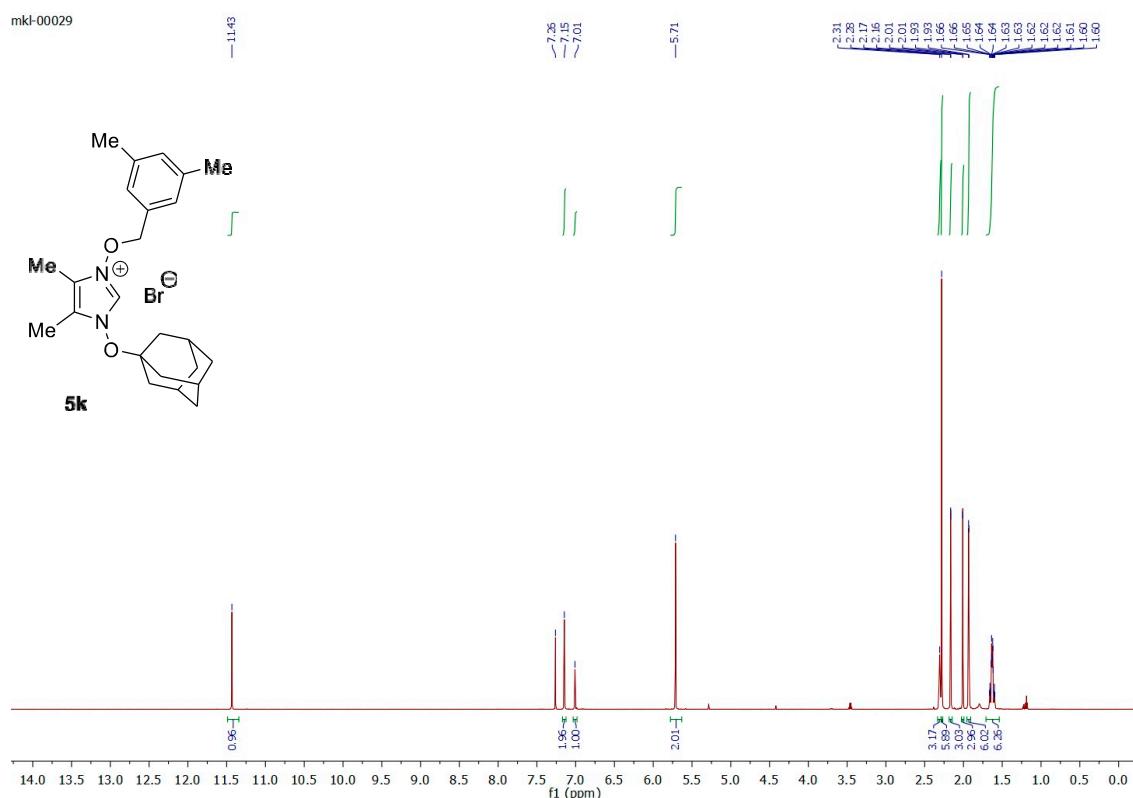
Bromide **5g** in a mixture with *ca.* 10% of **5d** (see the main text)

**Figure S30.** ^1H NMR of **5g** (CDCl_3 , 600 MHz).

**Figure S31.** ^{13}C NMR of **5g** (CDCl_3 , 151 MHz).**Figure S32.** ^1H NMR of **5h** (CDCl_3 , 600 MHz).

**Figure S33.** ^{13}C NMR of **5h** (CDCl_3 , 151 MHz).**Figure S34.** ^1H NMR of **5i** (CDCl_3 , 600 MHz).

**Figure S35.** ^{13}C NMR of **5i** (CDCl_3 , 151 MHz).**Figure S36.** ^1H NMR of **5j** (CDCl_3 , 600 MHz).

Figure S37. ^{13}C NMR of **5j** (CDCl_3 , 151 MHz).Figure S38. ^1H NMR of **5k** (CDCl_3 , 600 MHz).

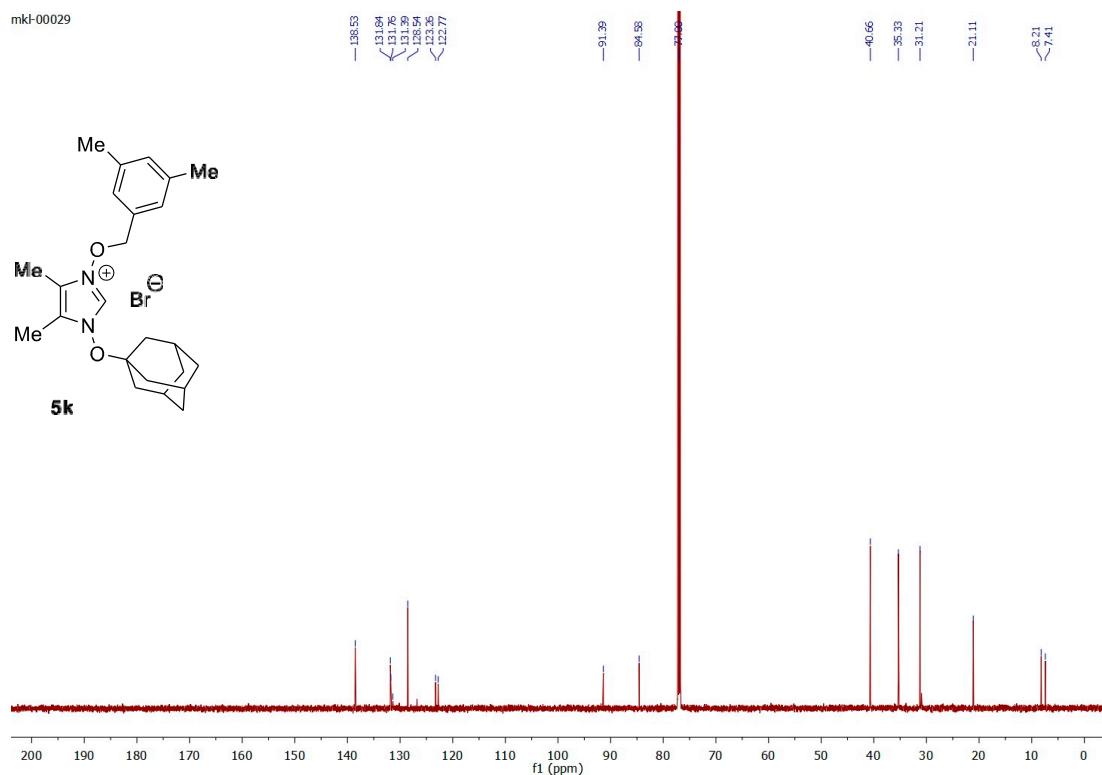


Figure S39. ^{13}C NMR of **5k** (CDCl_3 , 151 MHz).

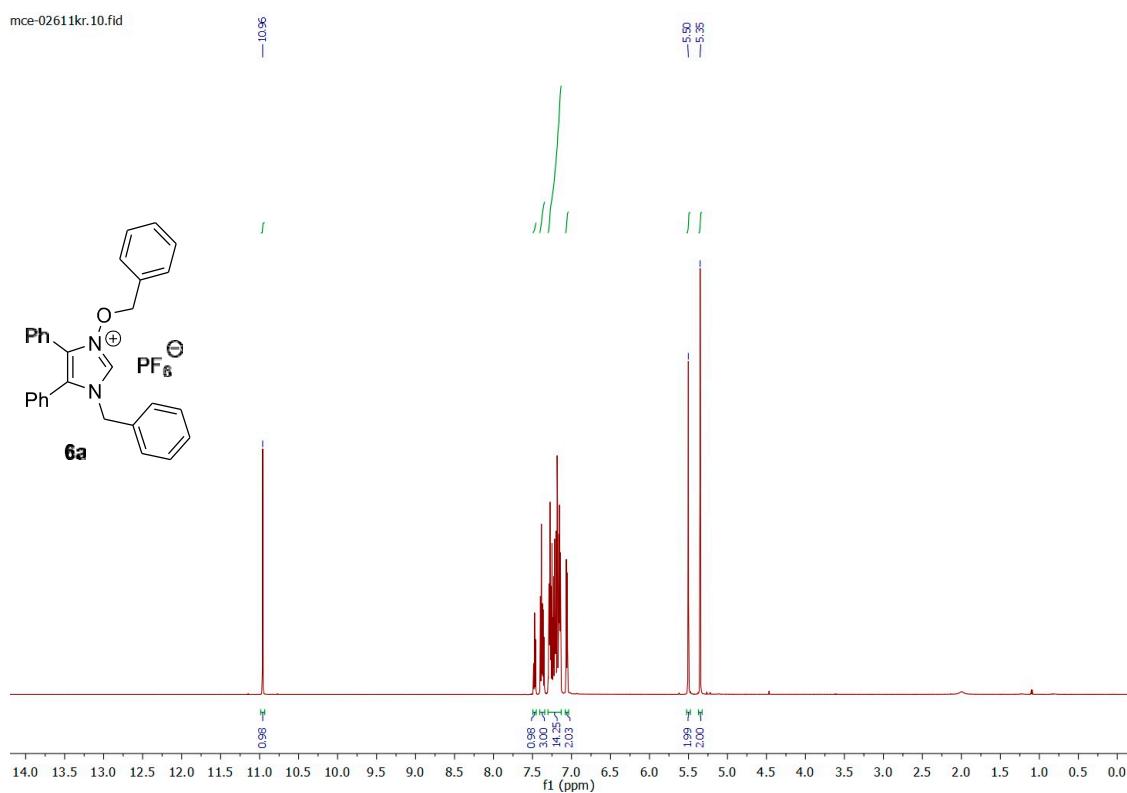
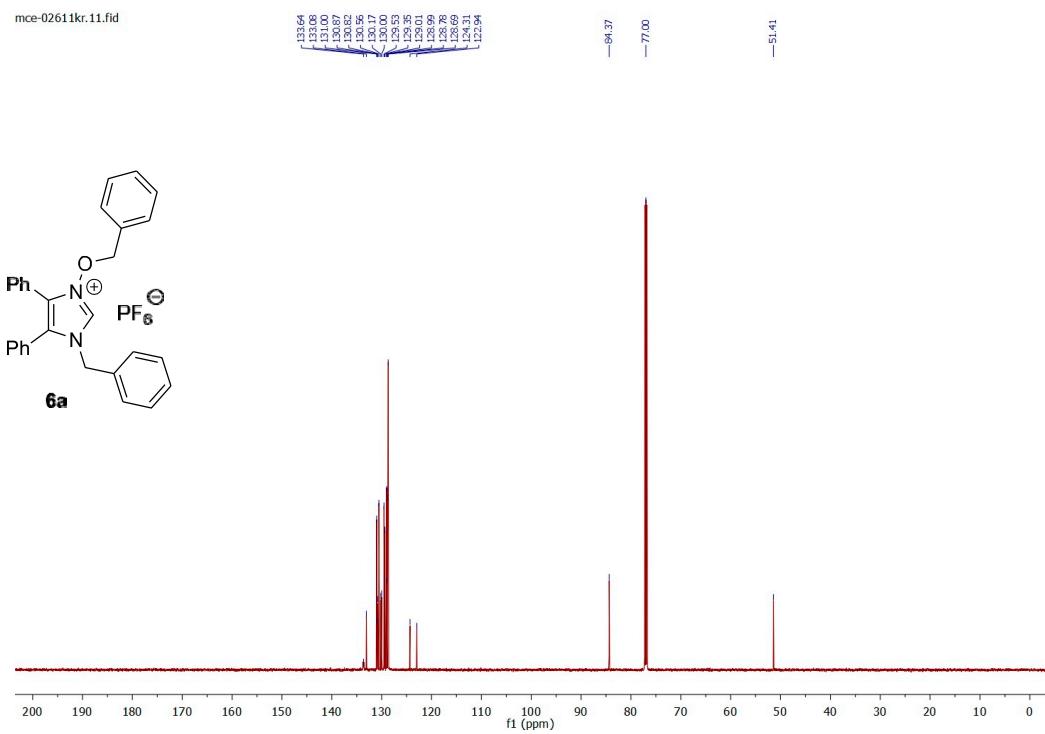
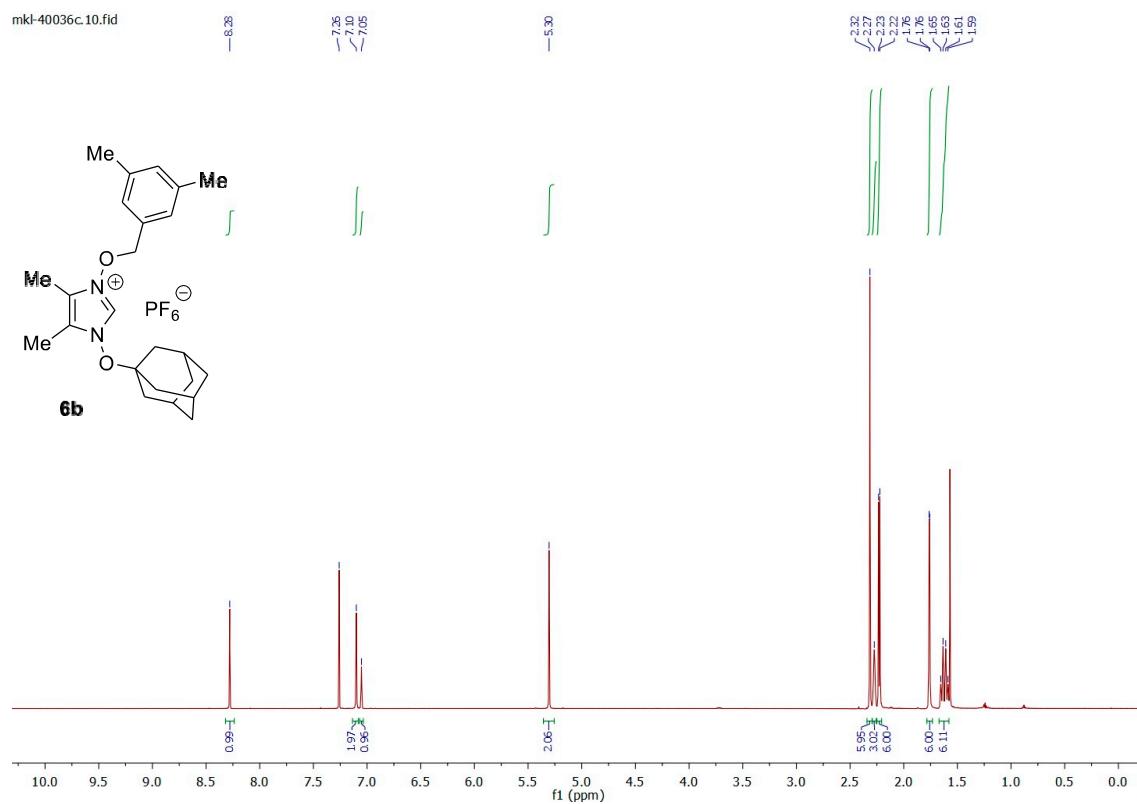
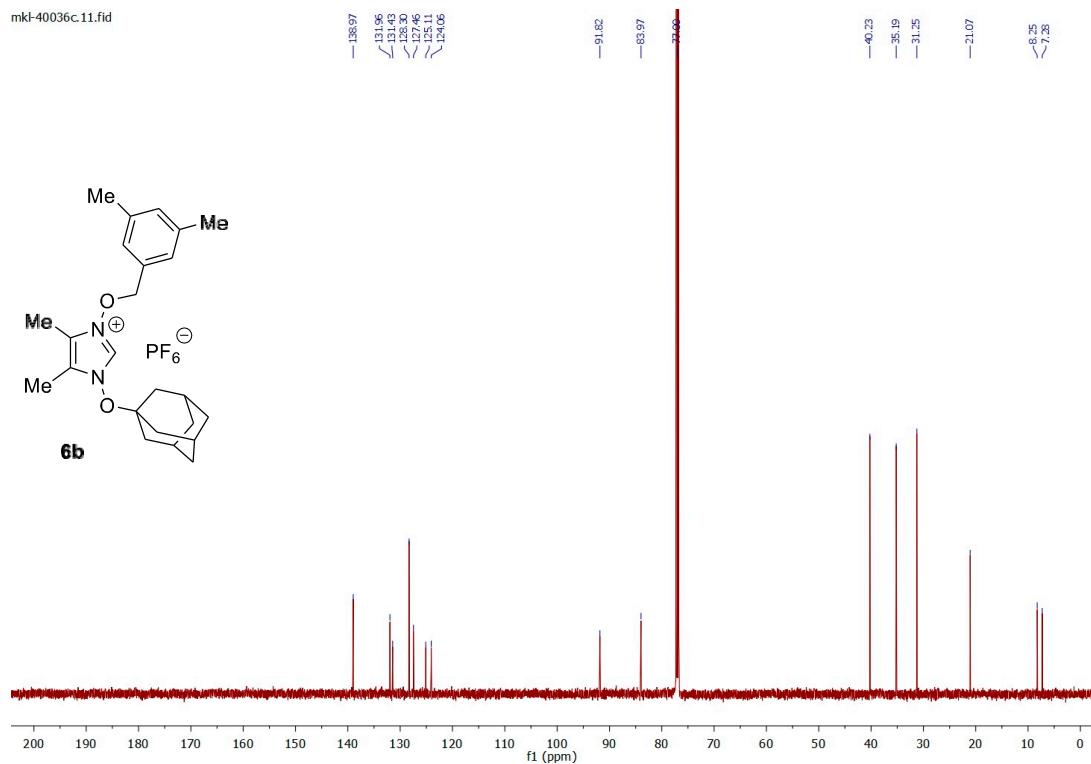
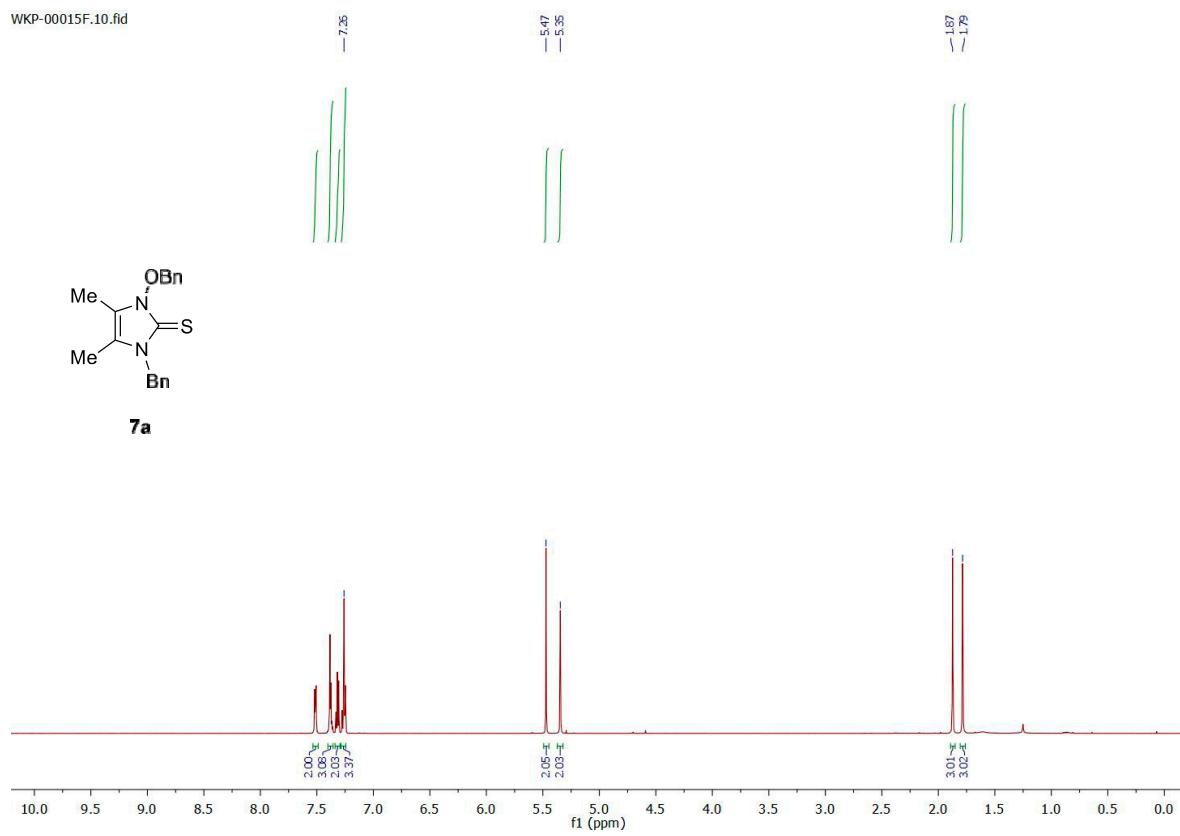
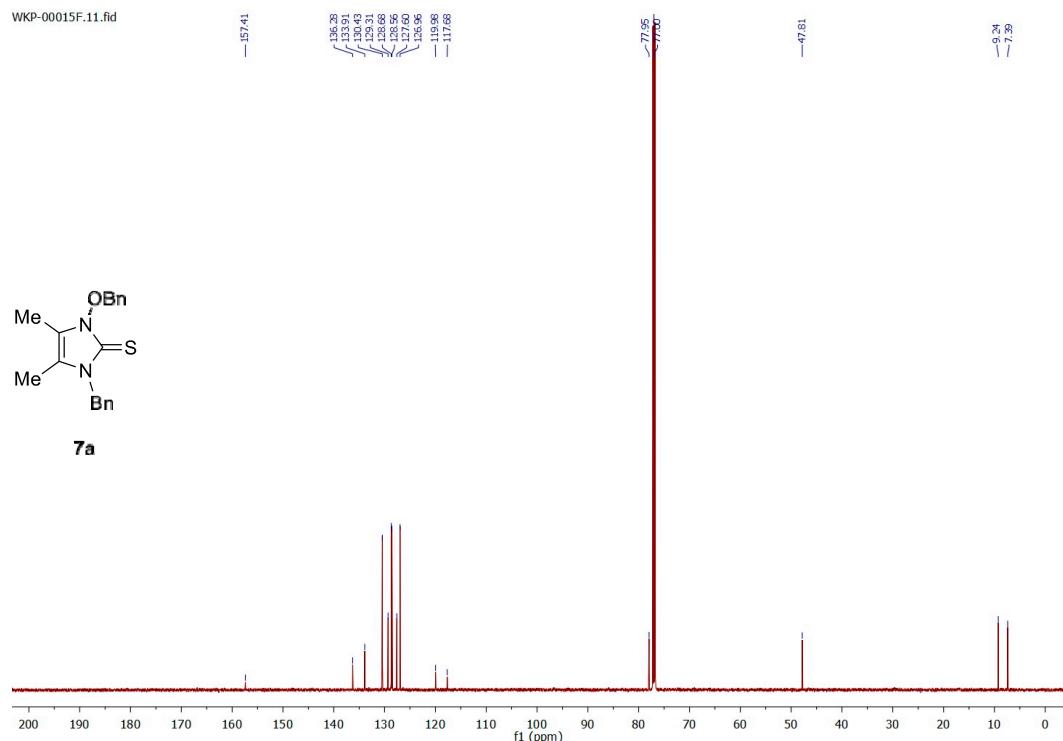
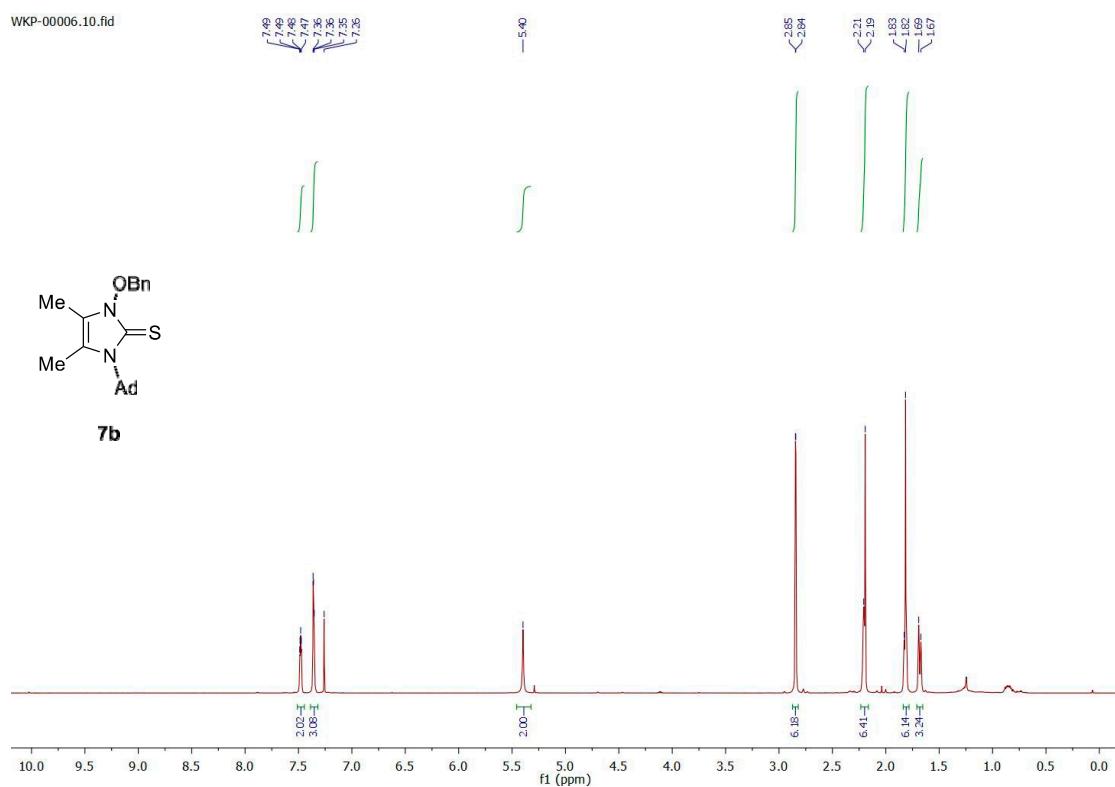
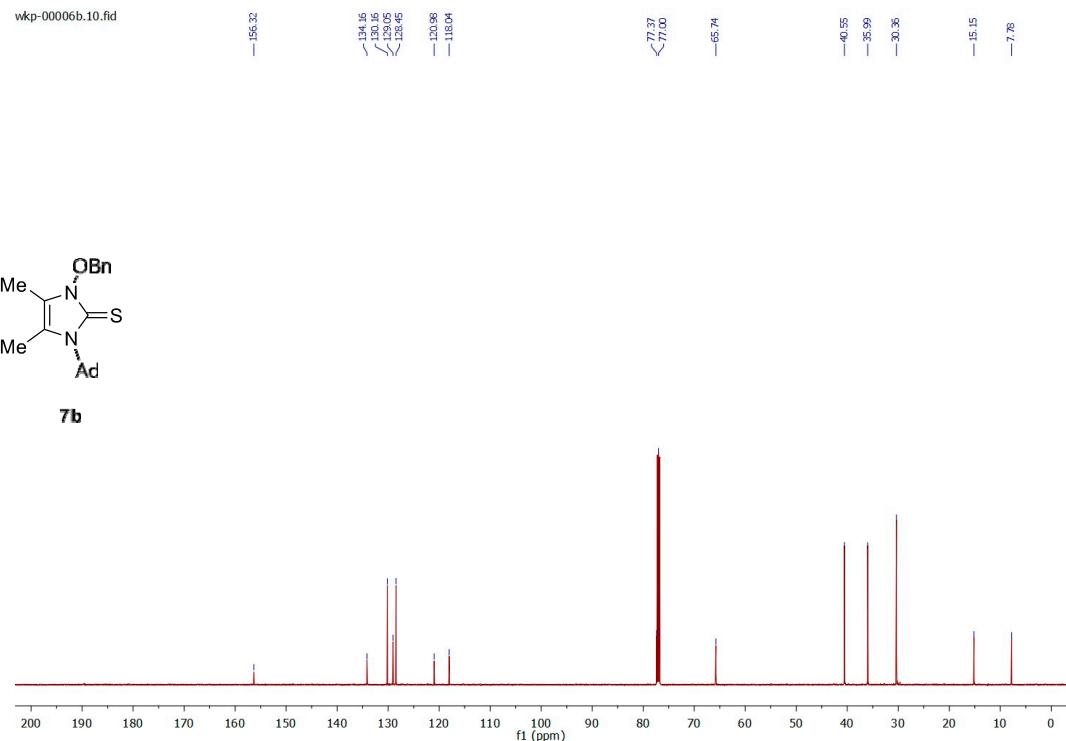
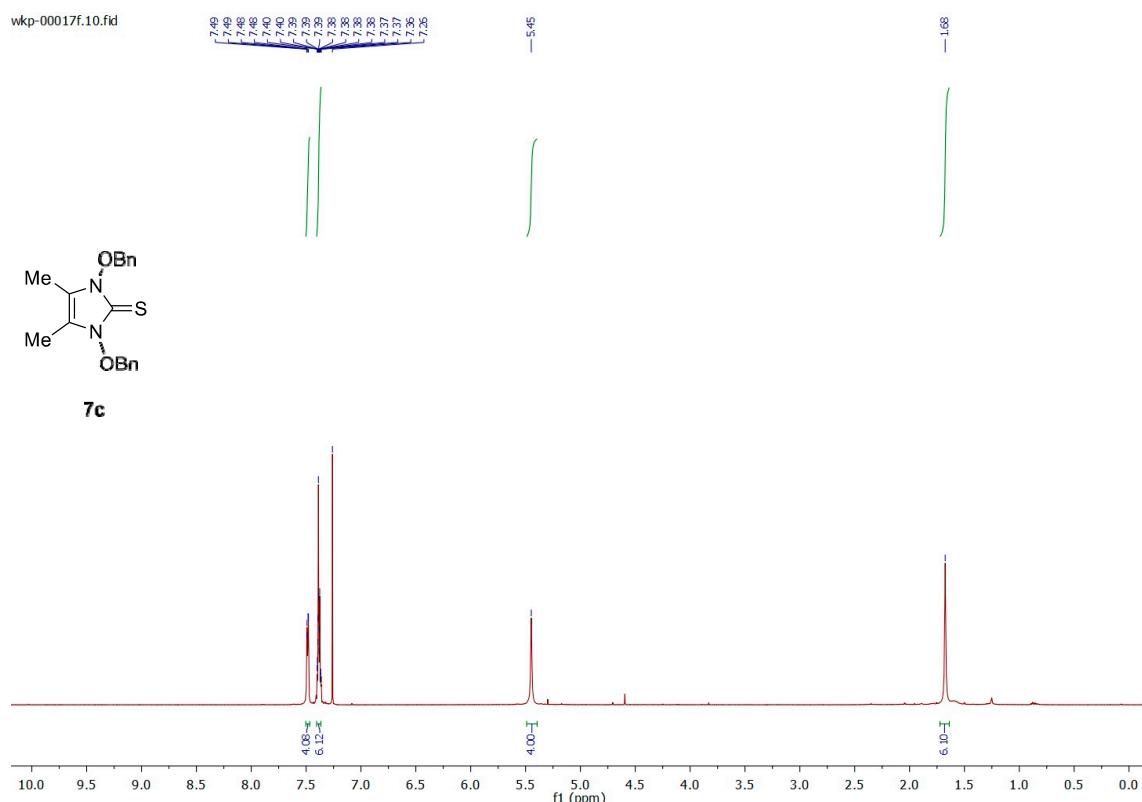


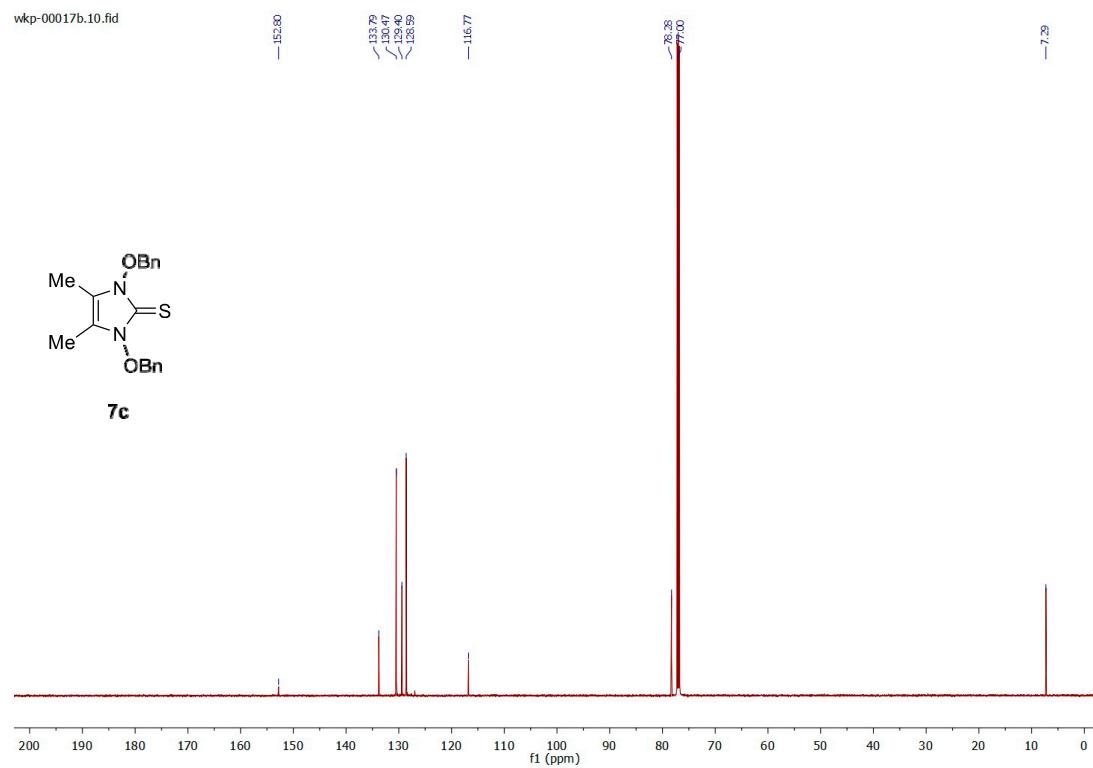
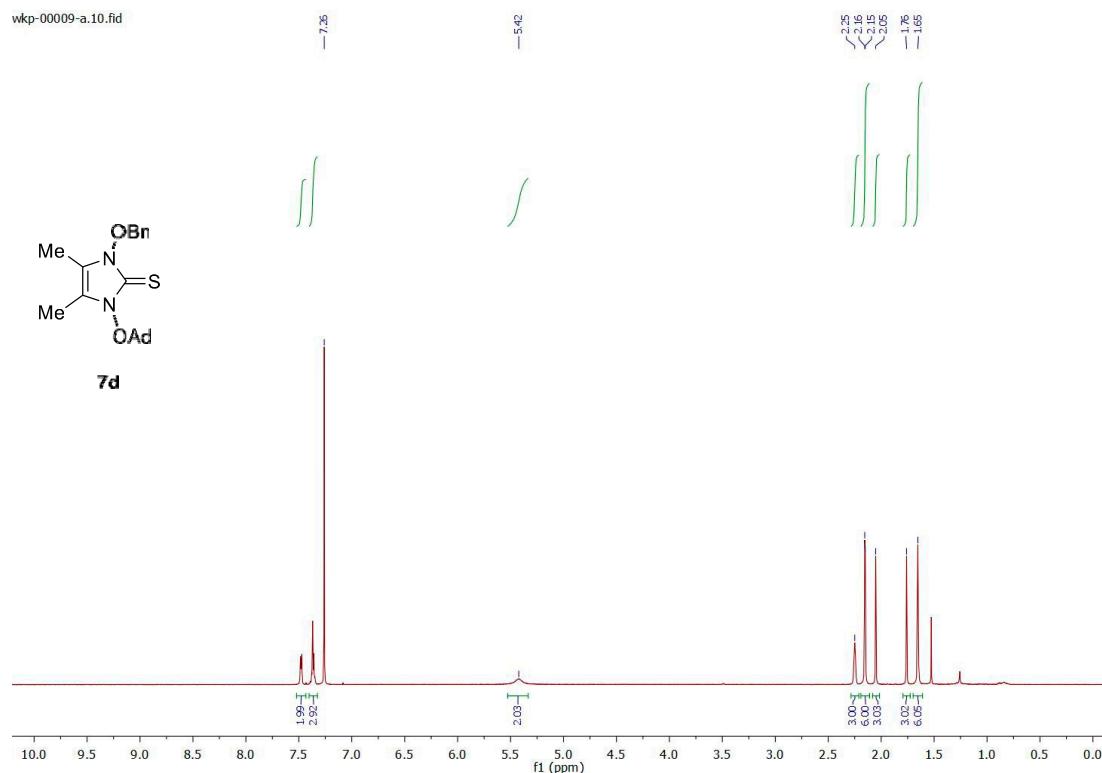
Figure S40. ^1H NMR of **6a** (CDCl_3 , 600 MHz).

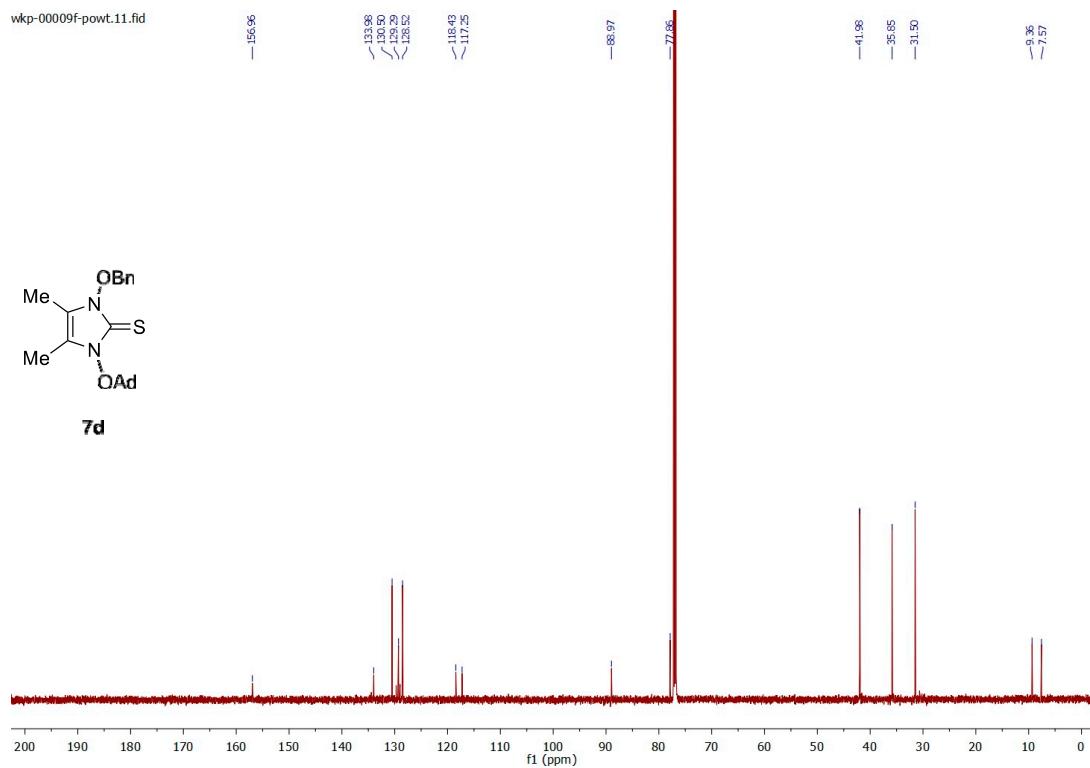
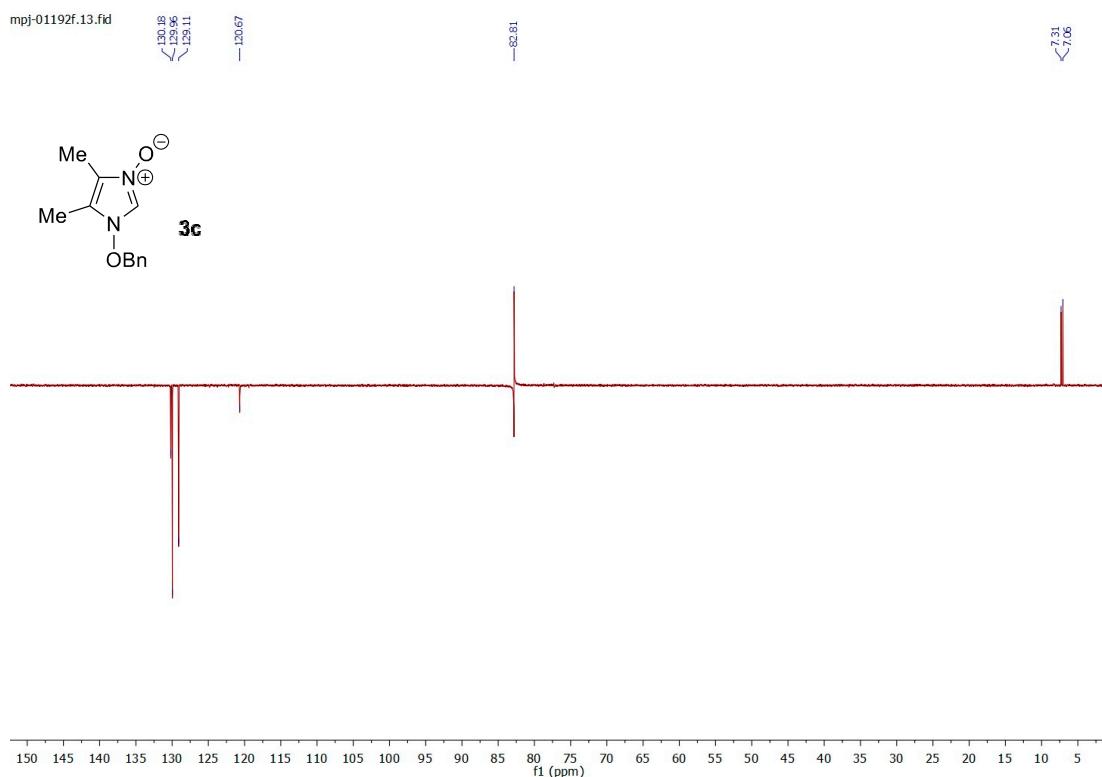
**Figure S41.** ^{13}C NMR of **6a** (CDCl_3 , 151 MHz)..**Figure S42.** ^1H NMR of **6b** (CDCl_3 , 600 MHz).

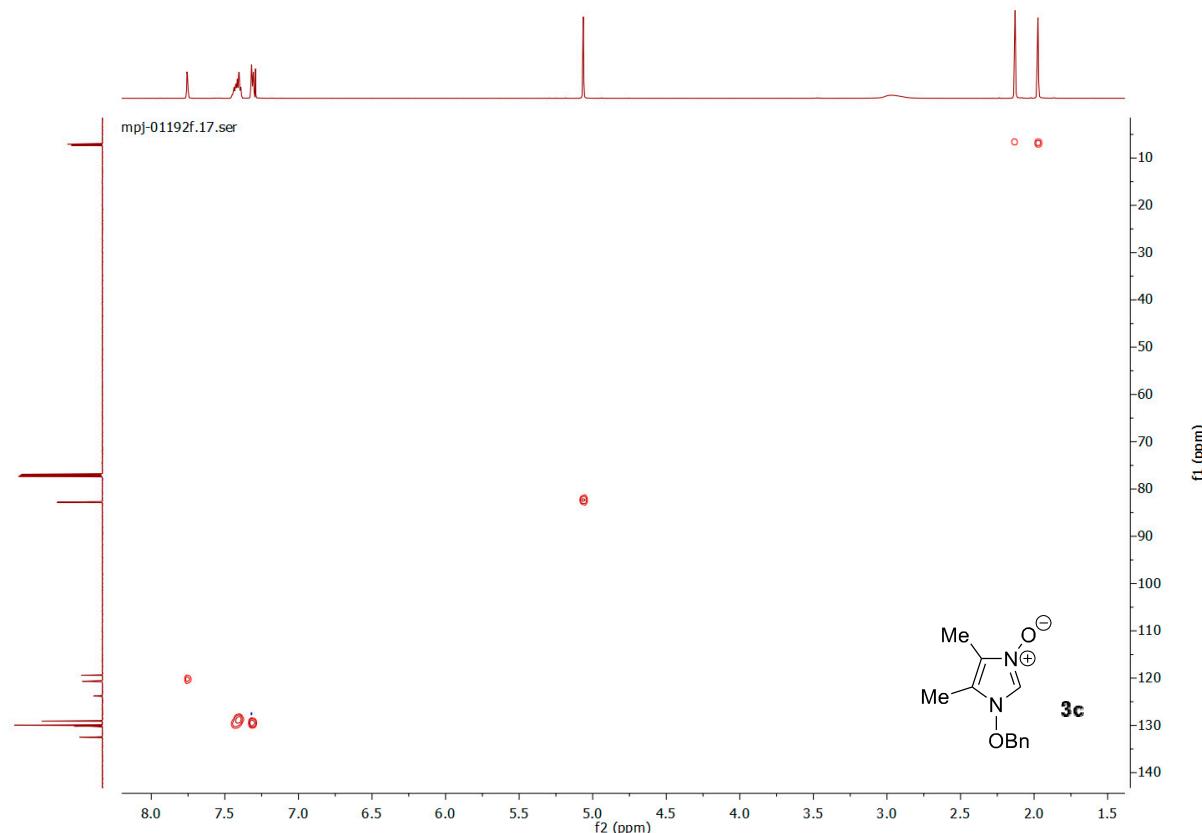
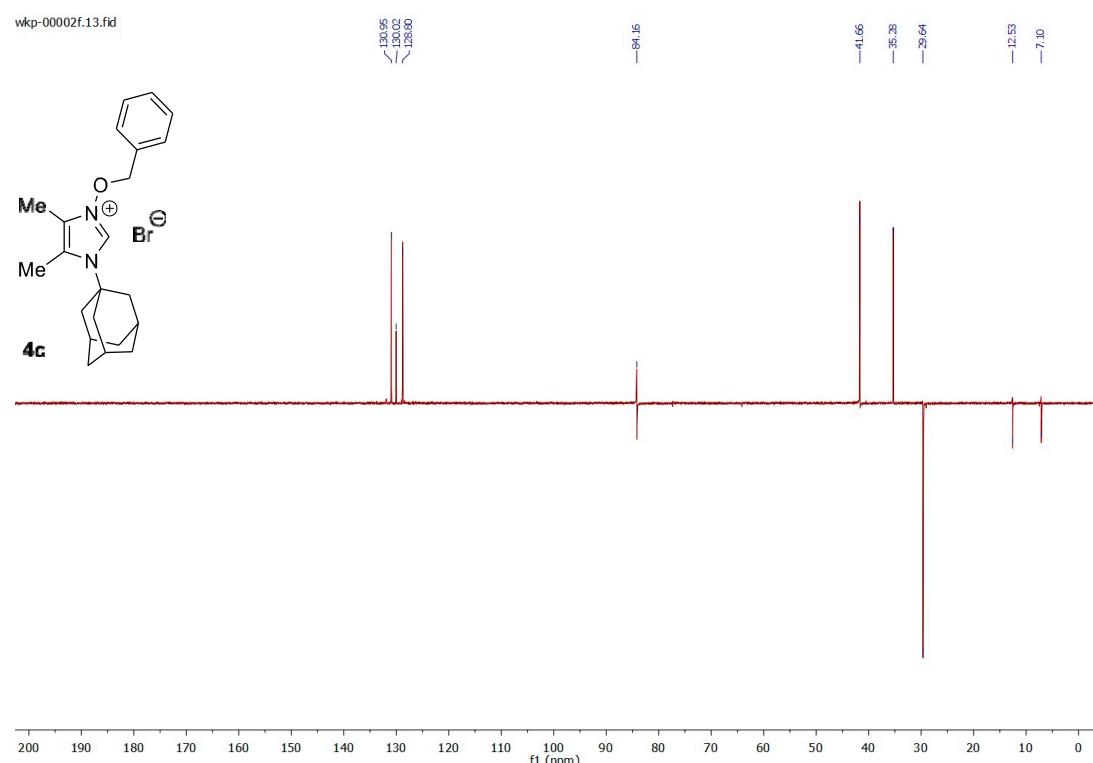
**Figure S43.** ^{13}C NMR of **6b** (CDCl_3 , 151 MHz)..**Figure S44.** ^1H NMR of **7a** (CDCl_3 , 600 MHz).

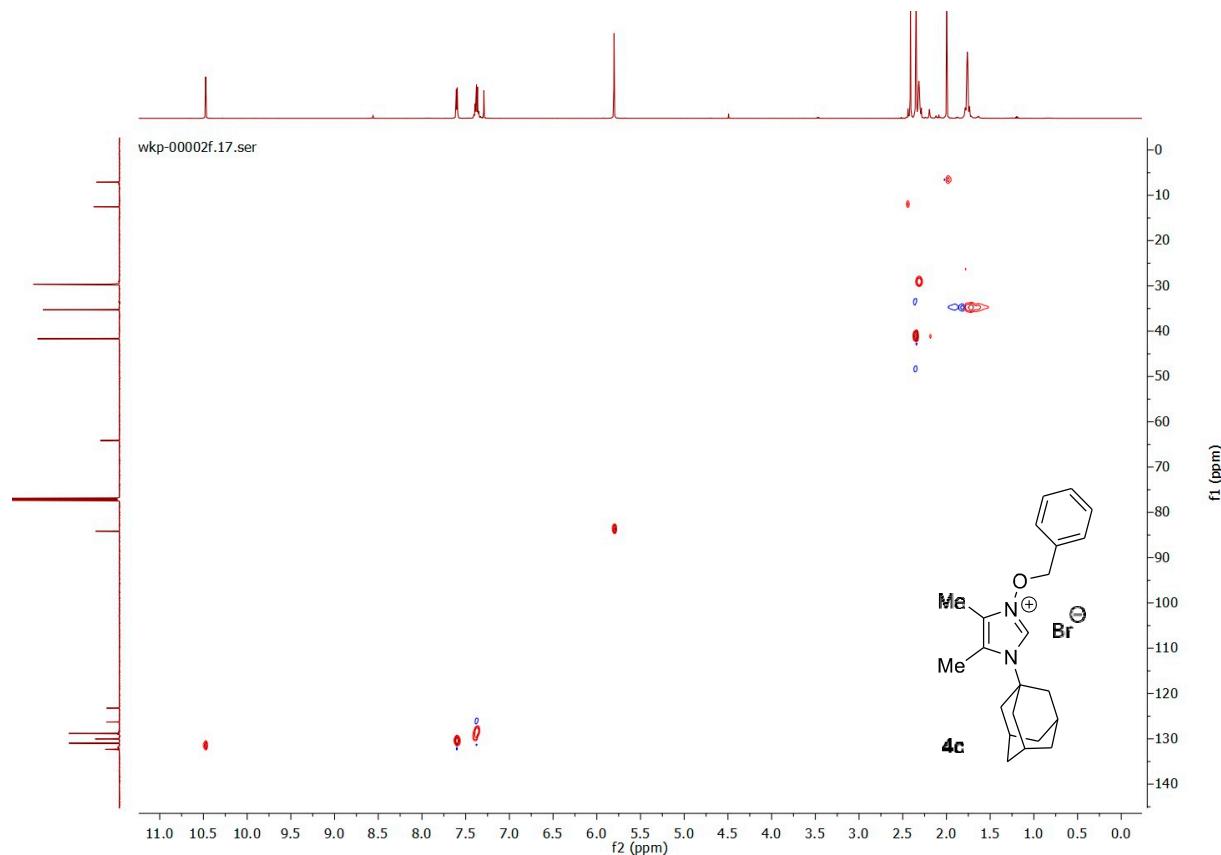
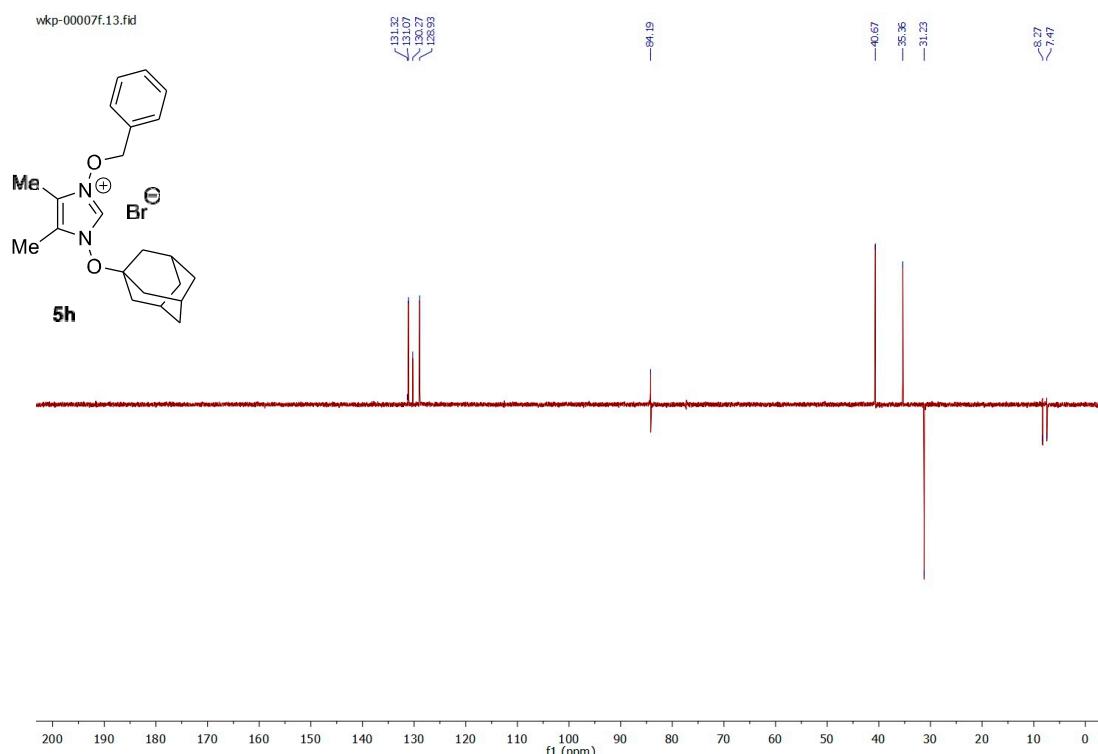
**Figure S45.** ^{13}C NMR of **7a** (CDCl_3 , 151 MHz).**Figure S46.** ^1H NMR of **7b** (CDCl_3 , 600 MHz).

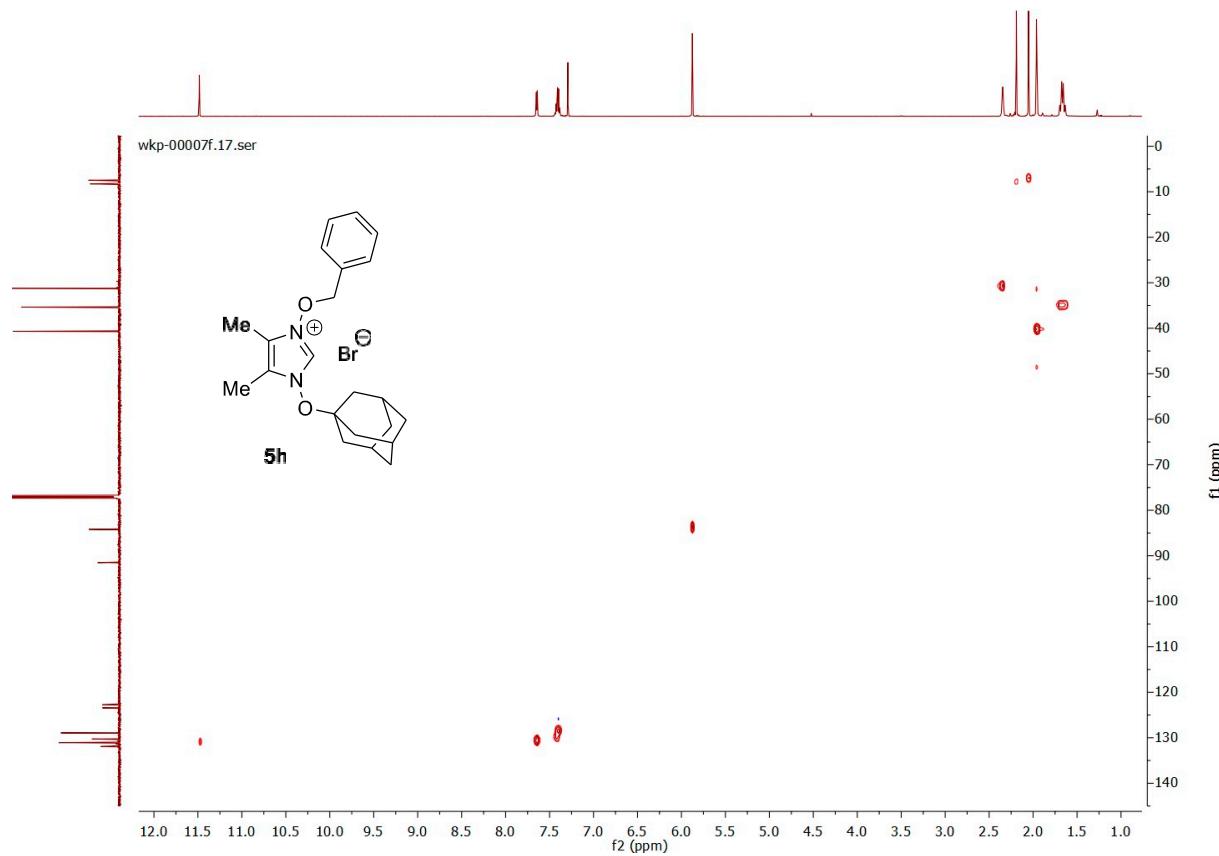
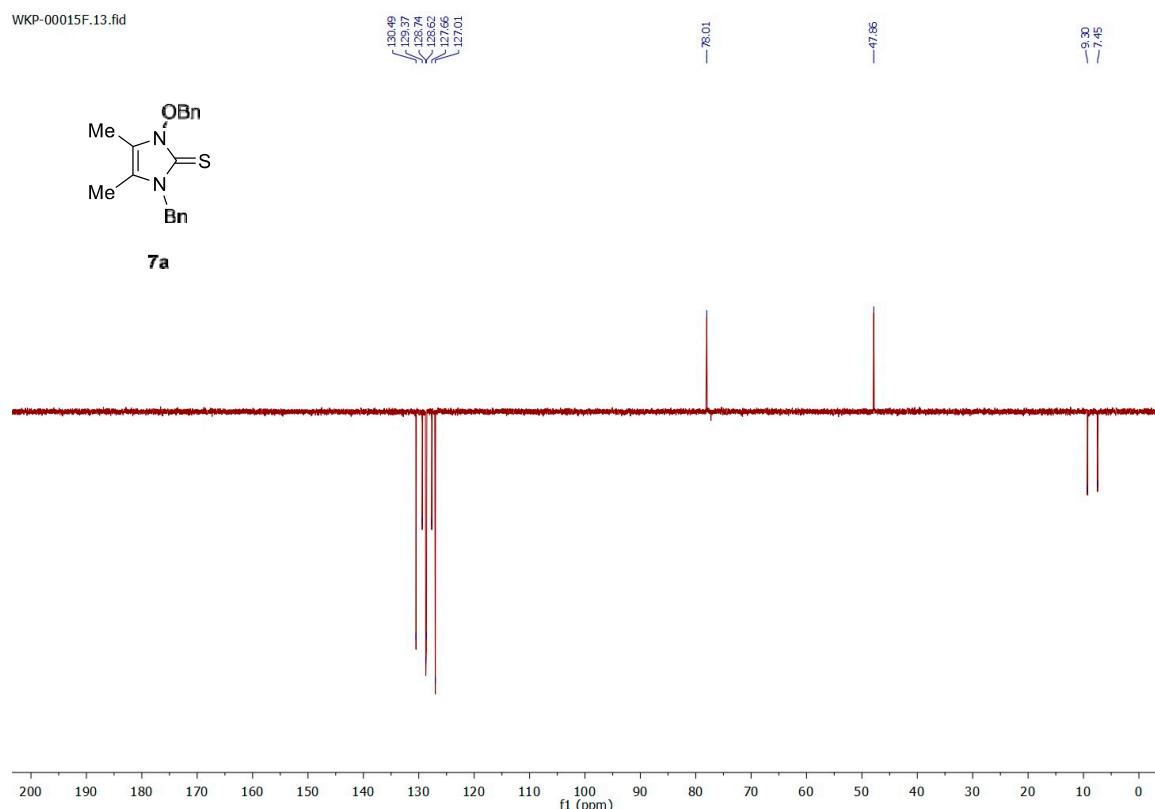
**Figure S47.** ^{13}C NMR of **7b** (CDCl_3 , 151 MHz).**Figure S48.** ^1H NMR of **7c** (CDCl_3 , 600 MHz).

**Figure S49.** ^{13}C NMR of **7c** (CDCl_3 , 151 MHz).**Figure S50.** ^1H NMR of **7d** (CDCl_3 , 600 MHz).

**Figure S51.** ^{13}C NMR of **7d** (CDCl_3 , 151 MHz).**Figure S52.** DEPT-135 of **3c** (CDCl_3).

Figure S53. HMQC of **3c** (CDCl_3).Figure S54. DEPT-135 of **4c** (CDCl_3).

Figure S55. HMQC of **4c** (CDCl_3).Figure S56. DEPT-135 of **5h** (CDCl_3).

**Figure S57.** HMQC of **5h** (CDCl_3).**Figure S58.** DEPT-135 of **7a** (CDCl_3).

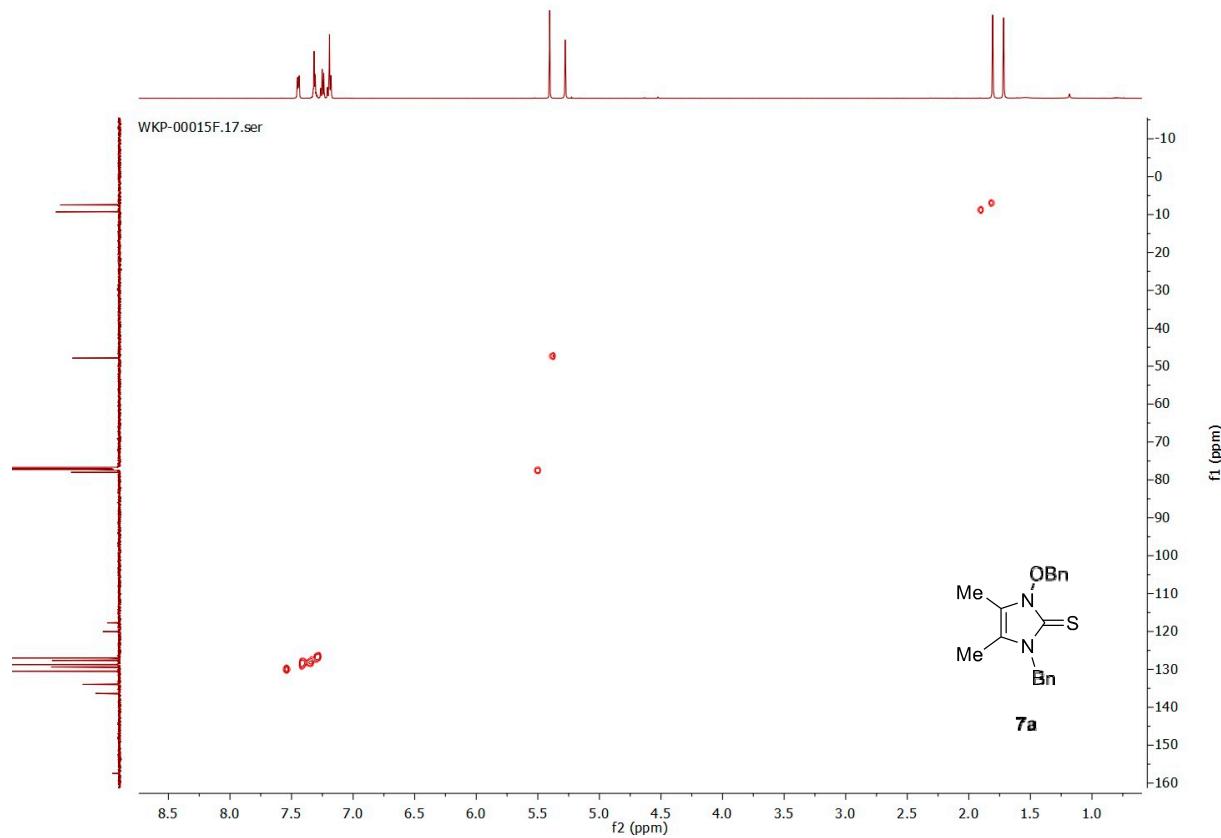


Figure S59. HMQC of **7a** (CDCl_3).