

## Supplementary Material

# KI-catalyzed aminobromination of olefins with **TsNH<sub>2</sub>-NBS combination**

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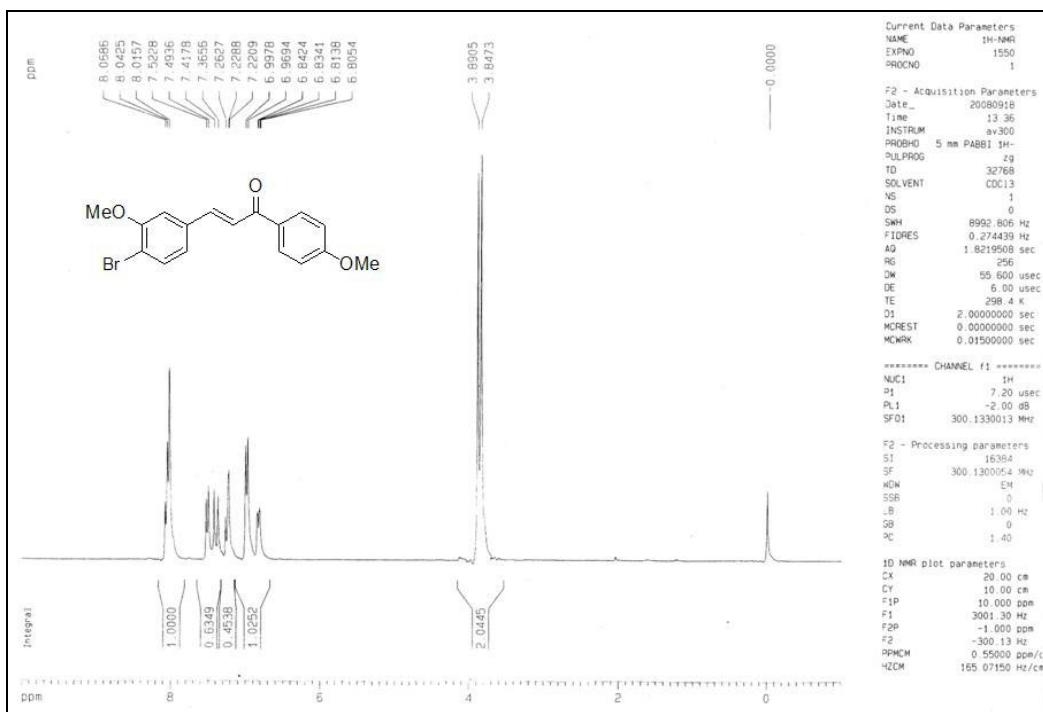


Figure 1. <sup>1</sup>H NMR spectrum of 8d

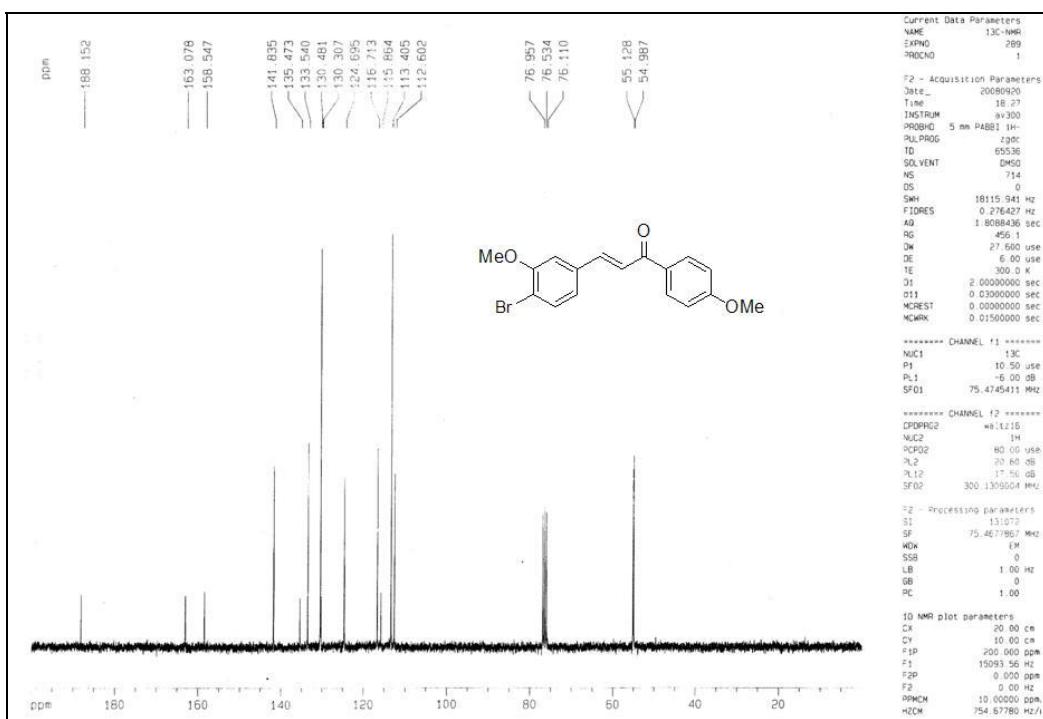


Figure 2. <sup>13</sup>C NMR spectrum of 8d

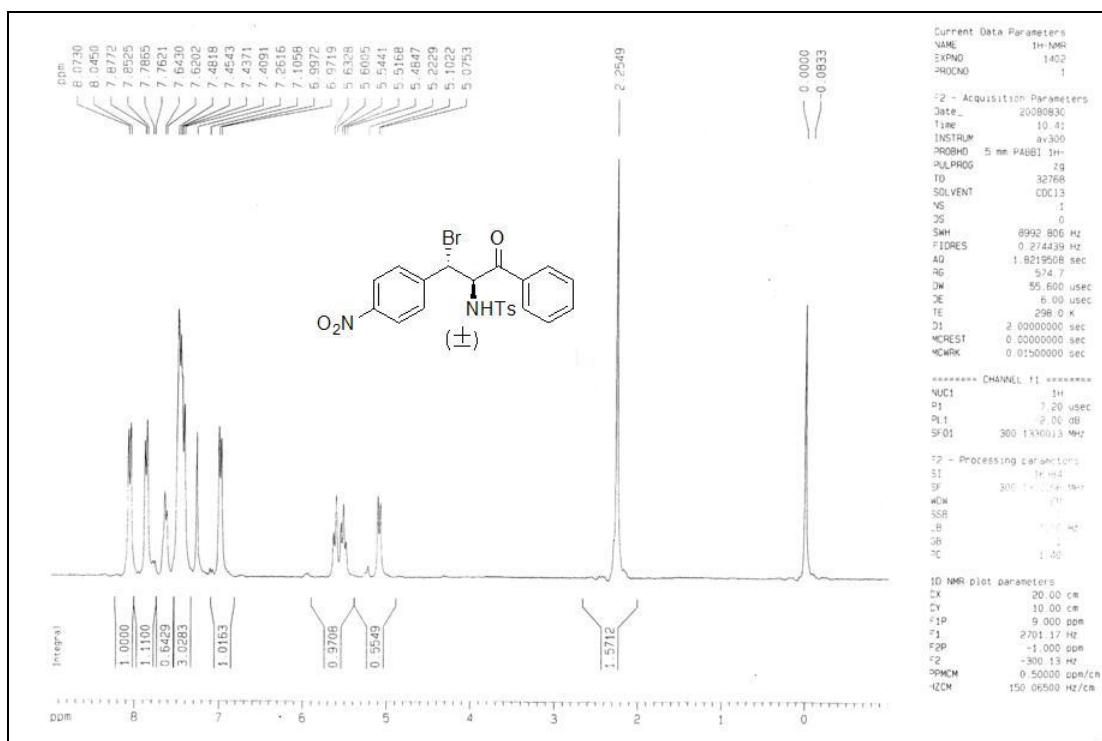


Figure 3.  $^1\text{H}$  NMR spectrum of **9b**

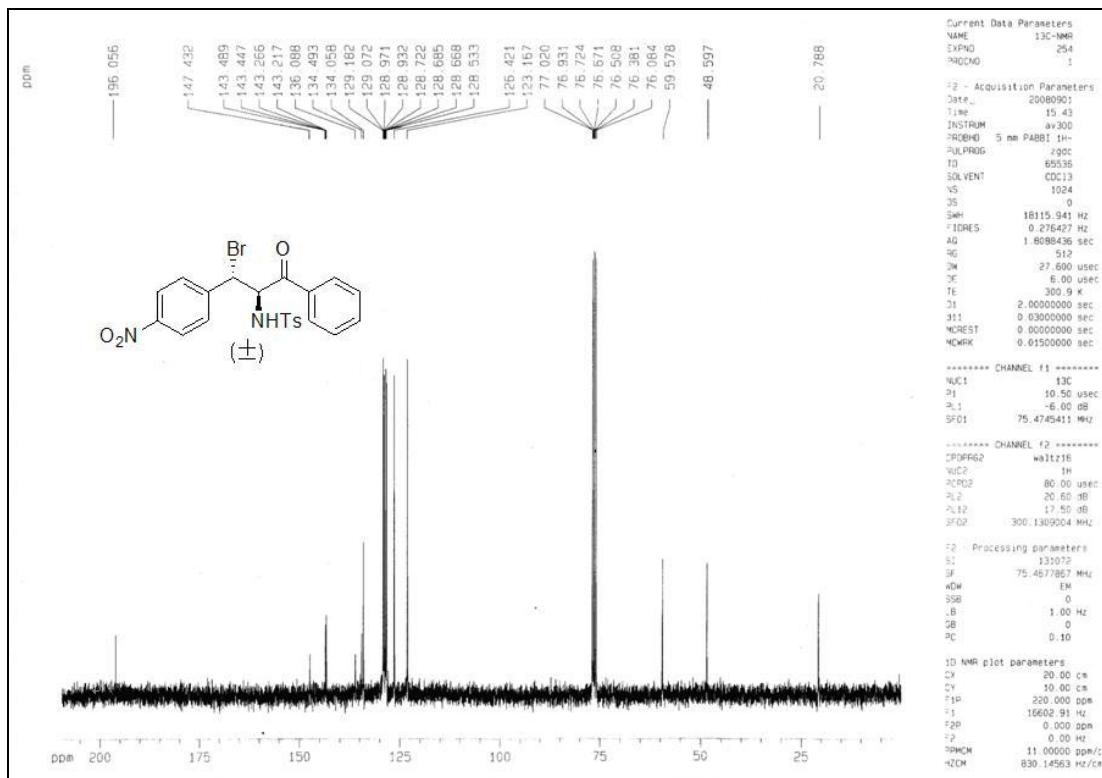


Figure 4.  $^{13}\text{C}$  NMR spectrum of **9b**

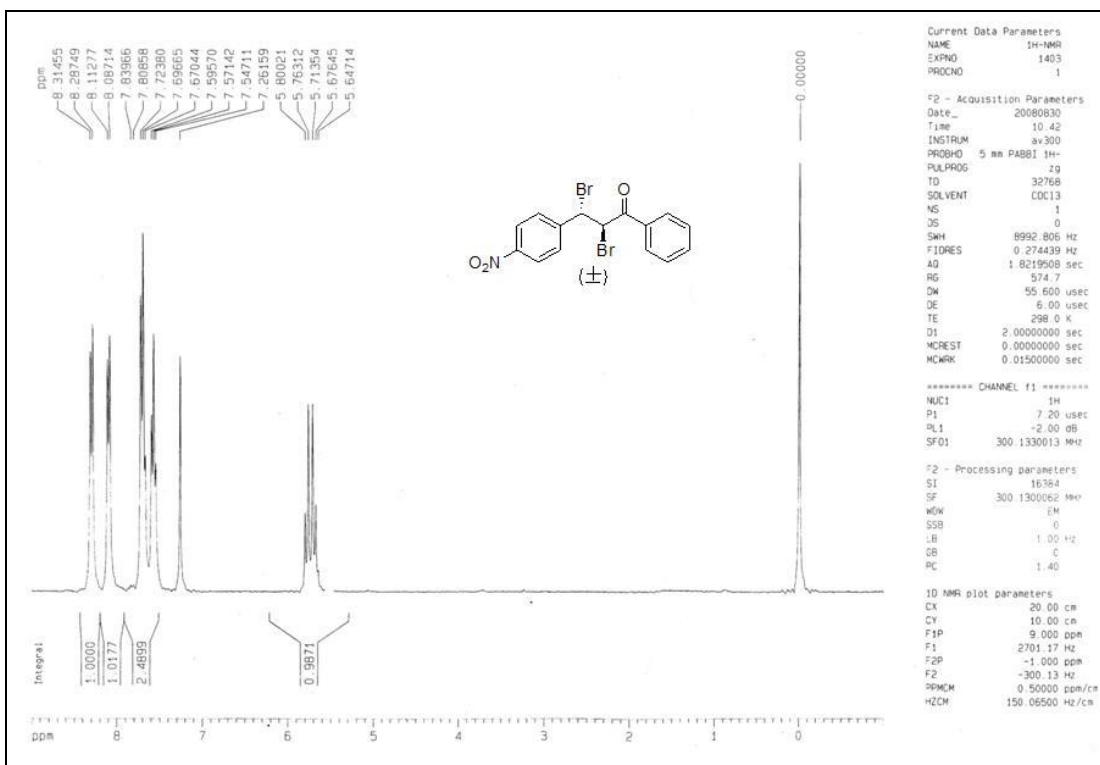


Figure 5. <sup>1</sup>H NMR spectrum of 9e

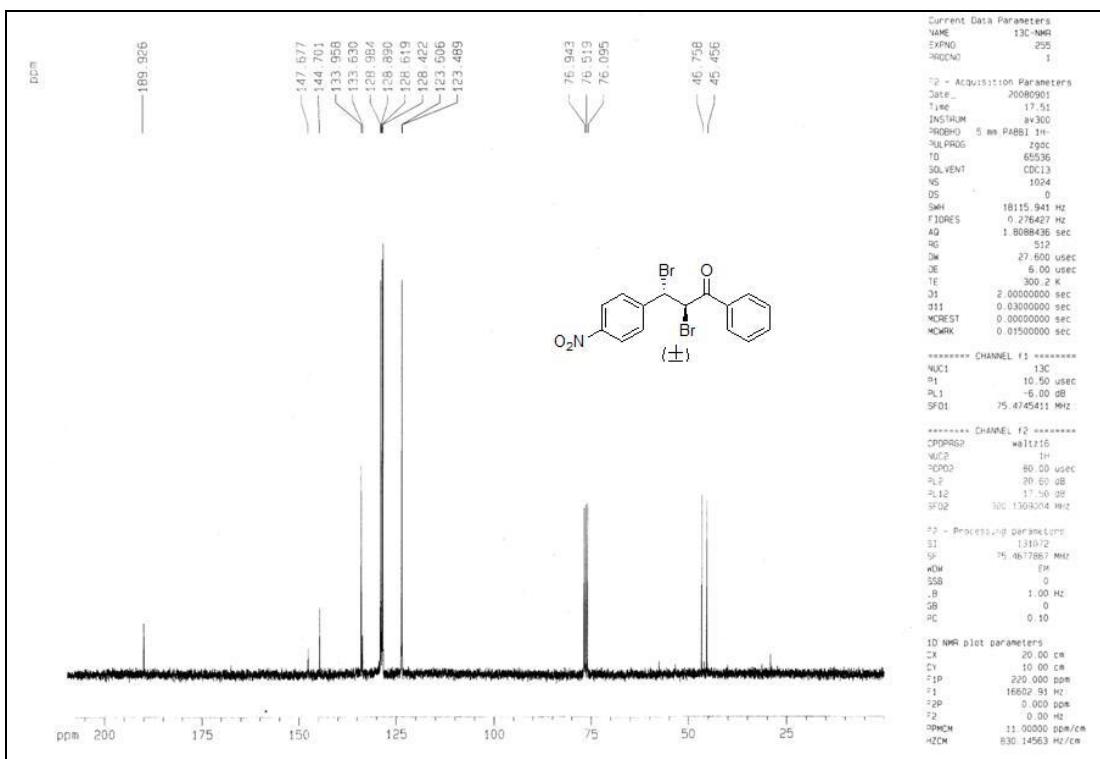


Figure 6. <sup>13</sup>C NMR spectrum of 9e

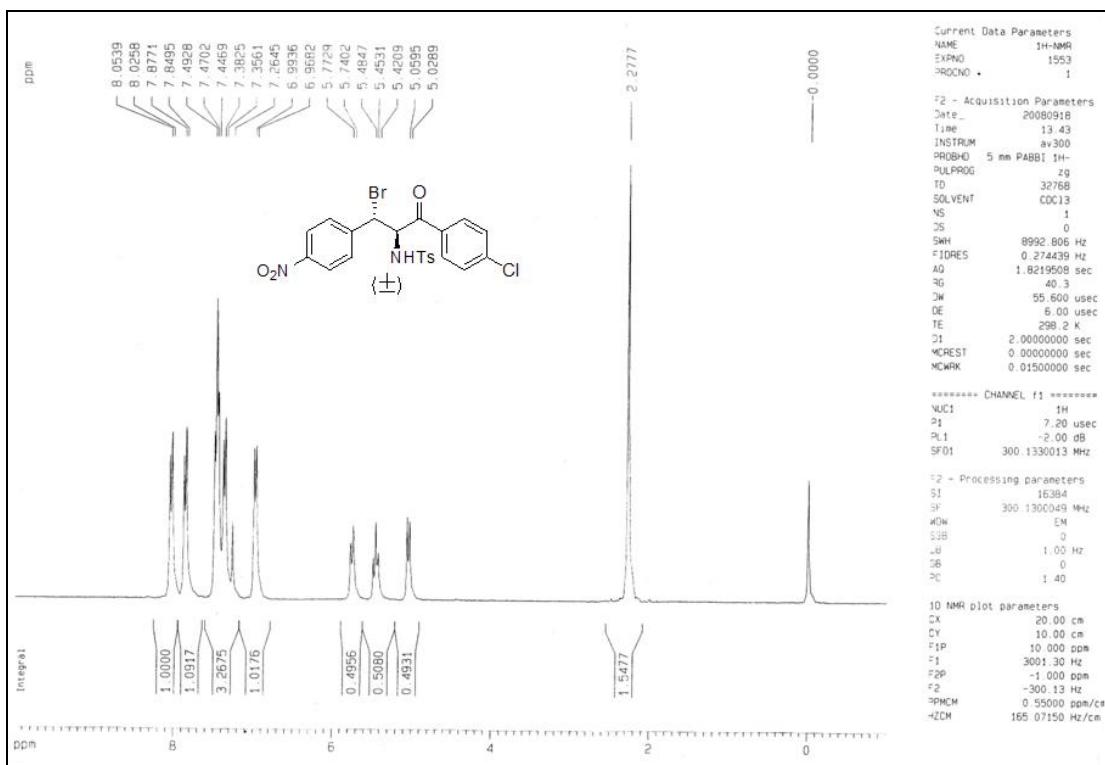


Figure 7.  $^1\text{H}$  NMR spectrum of **10b**

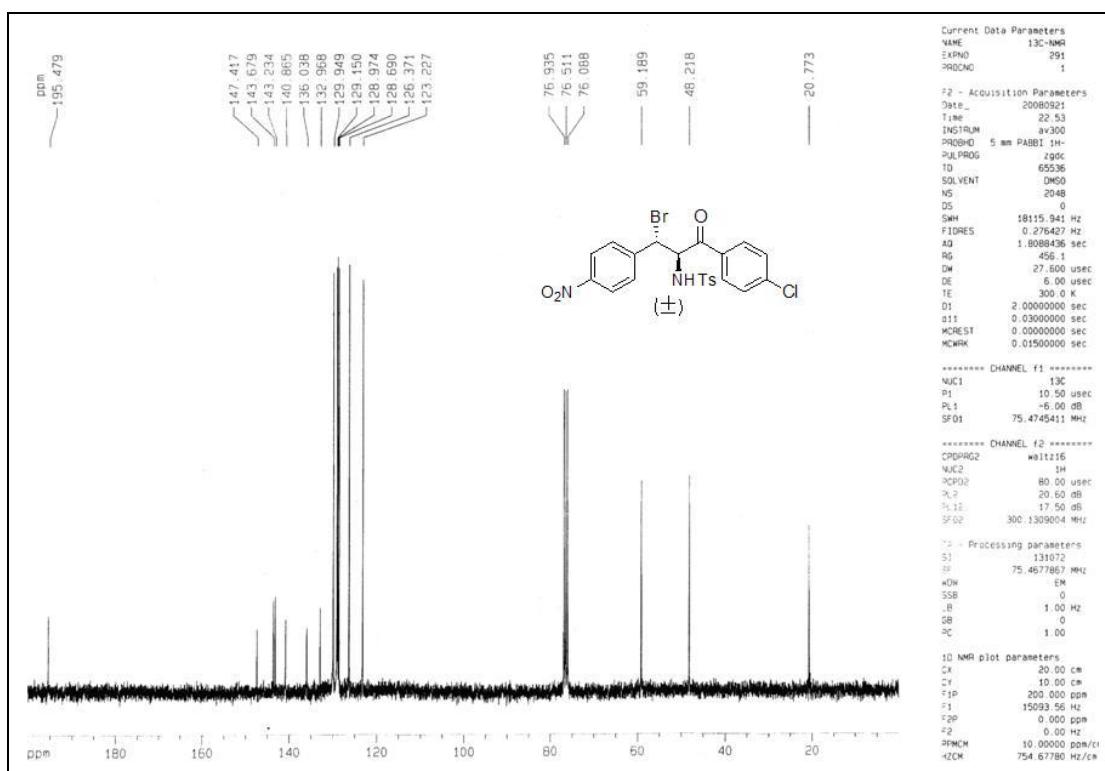
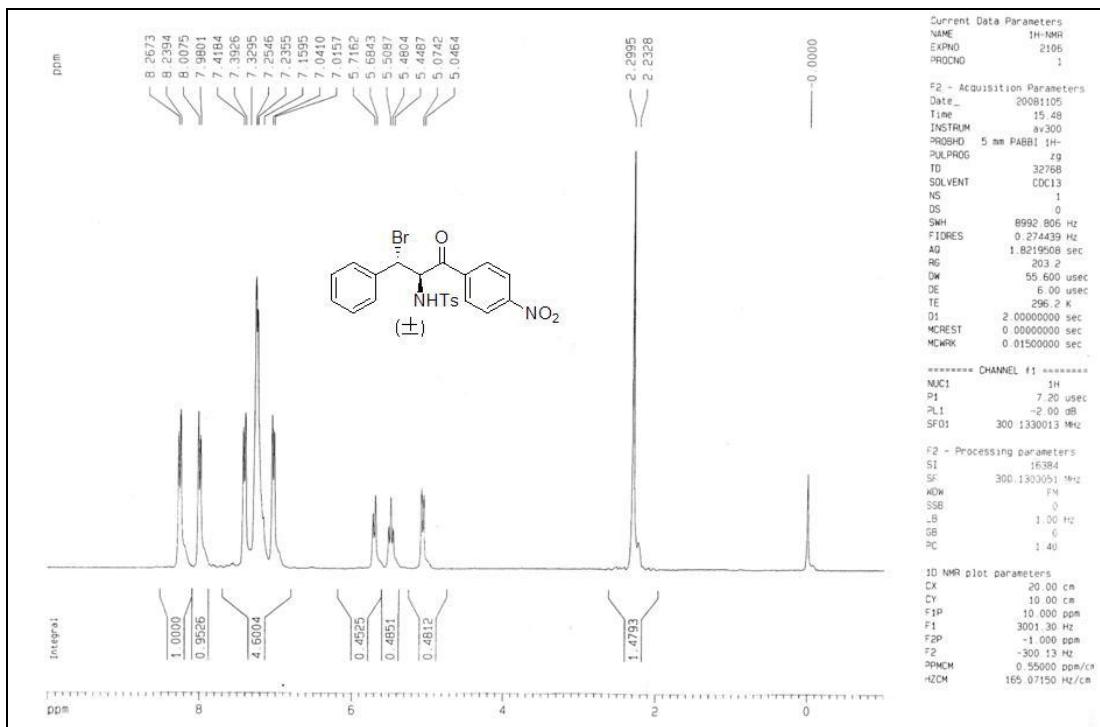
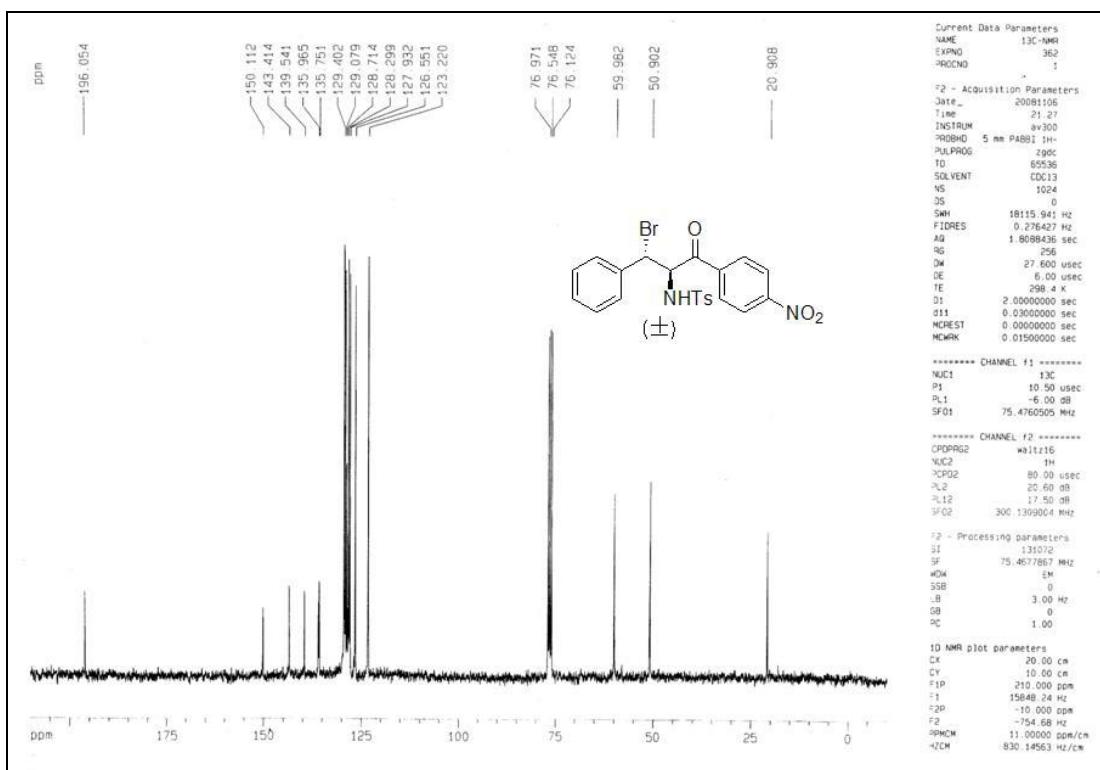


Figure 8.  $^{13}\text{C}$  NMR spectrum of **10b**



**Figure 9.**  $^1\text{H}$  NMR spectrum of **11b**



**Figure 10.**  $^{13}\text{C}$  NMR spectrum of **11b**

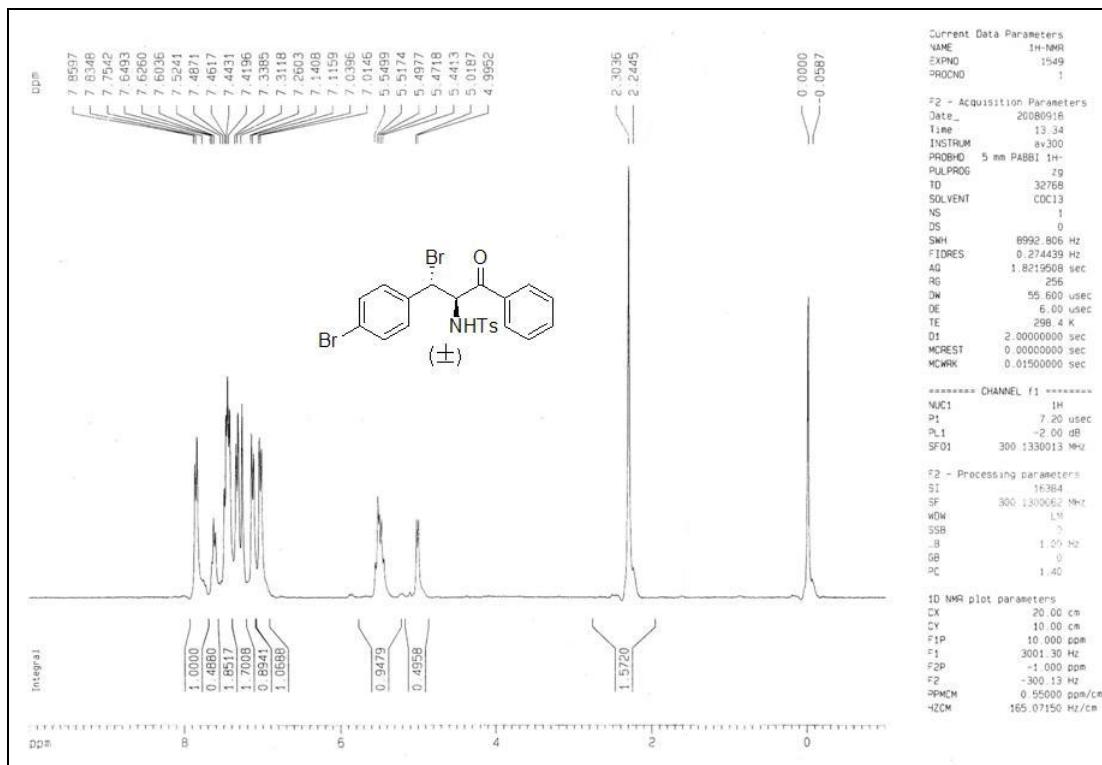


Figure 11. <sup>1</sup>H NMR spectrum of 14b

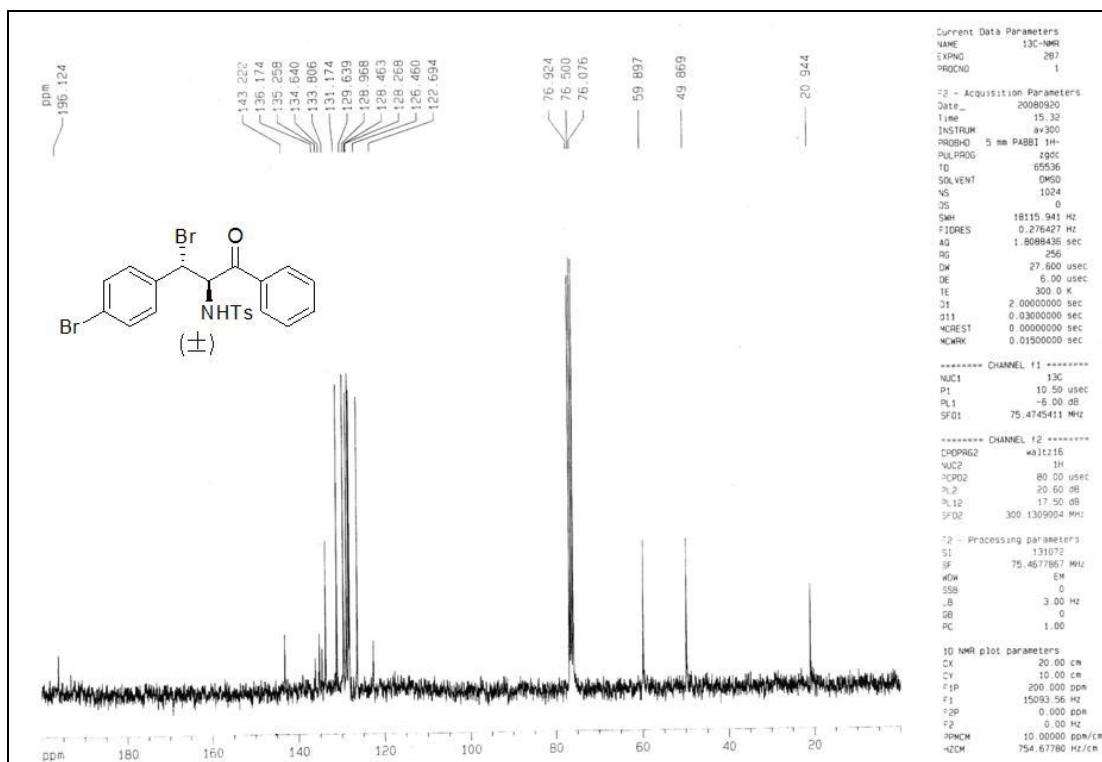


Figure 12. <sup>13</sup>C NMR spectrum of 14b

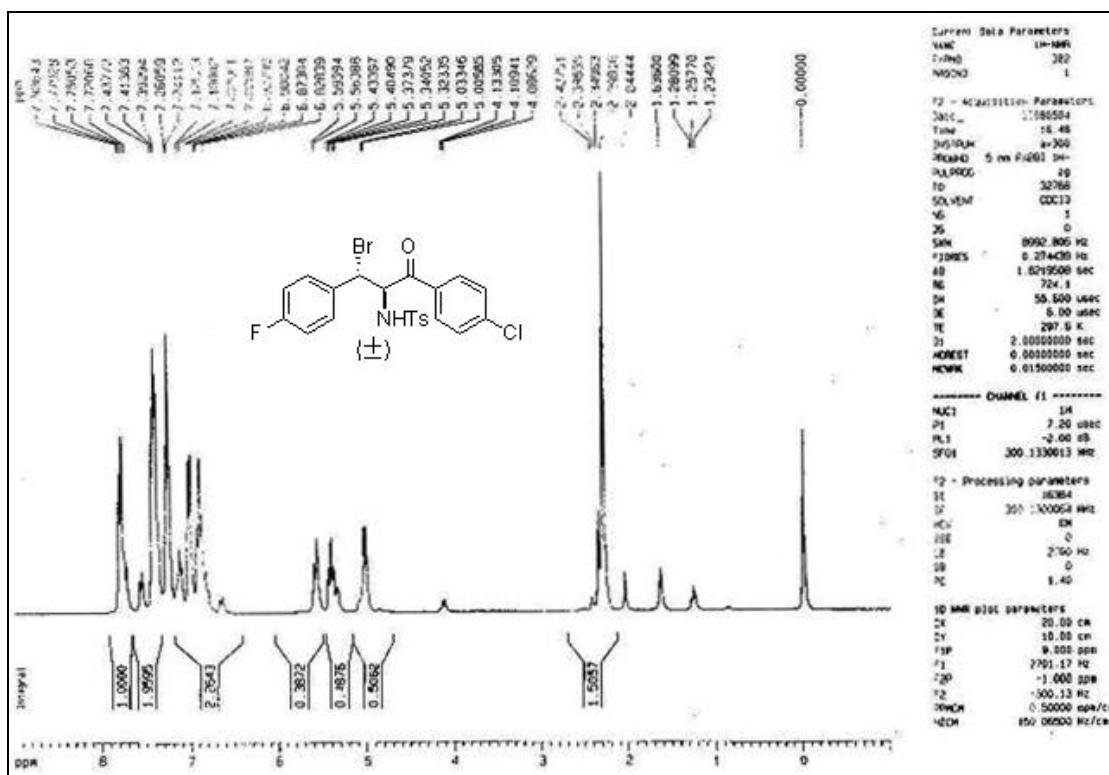


Figure 13.  $^1\text{H}$  NMR spectrum of 16b

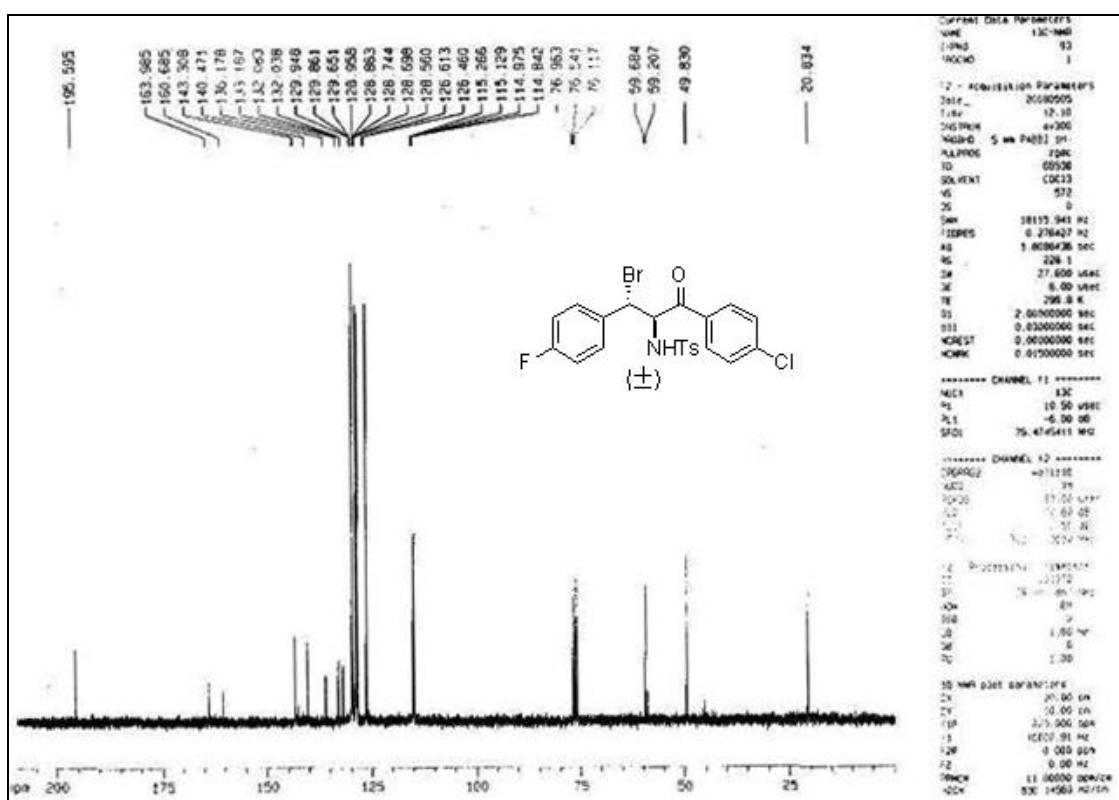


Figure 14.  $^{13}\text{C}$  NMR spectrum of 16b

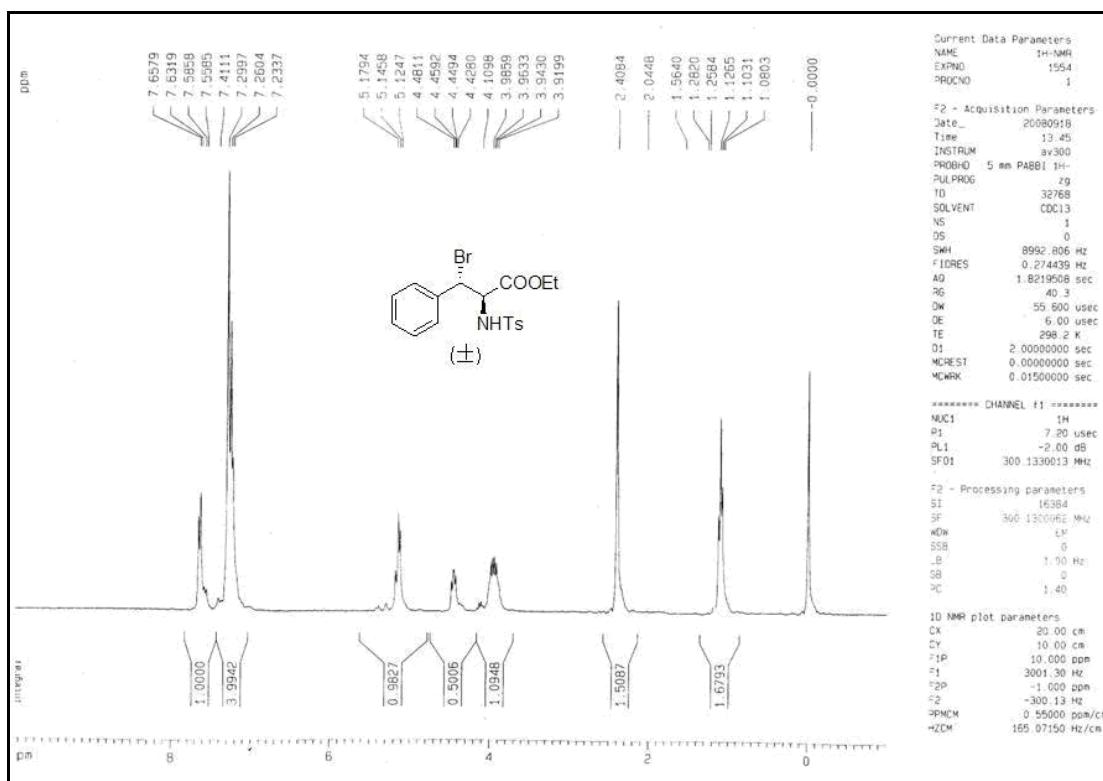


Figure 15. <sup>1</sup>H NMR spectrum of 21b

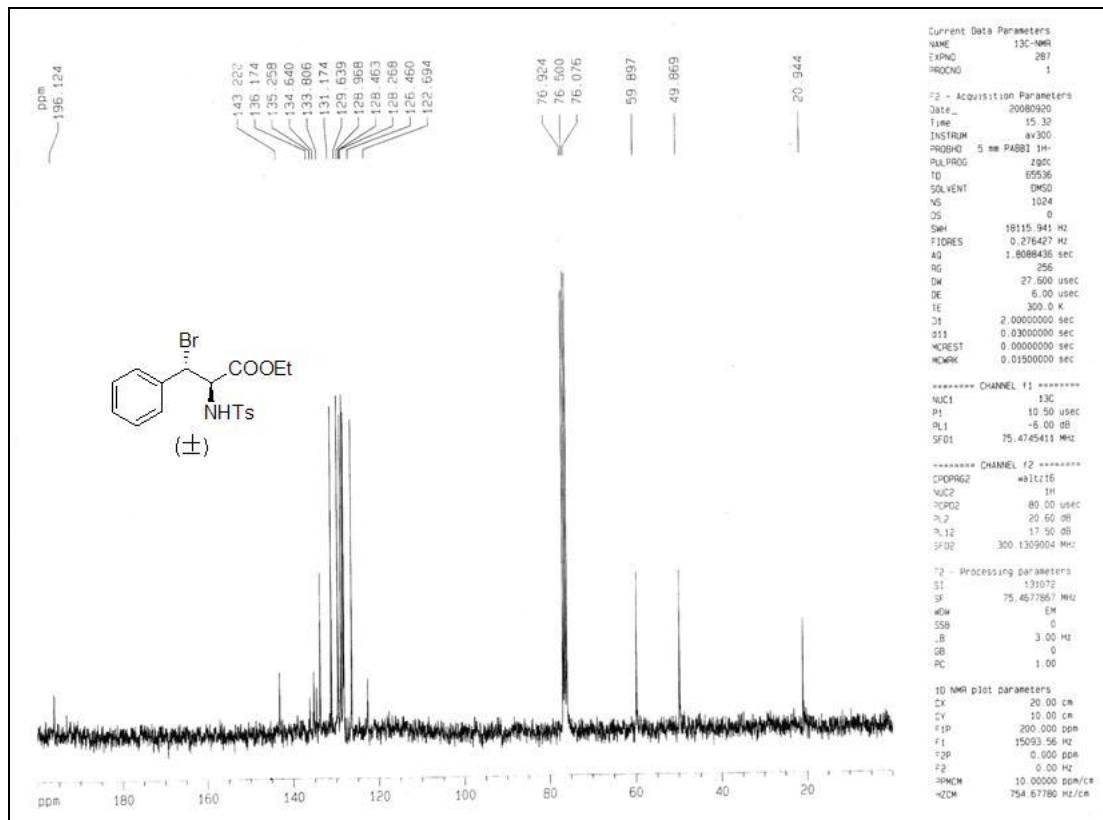


Figure 16. <sup>13</sup>C NMR spectrum of 21b

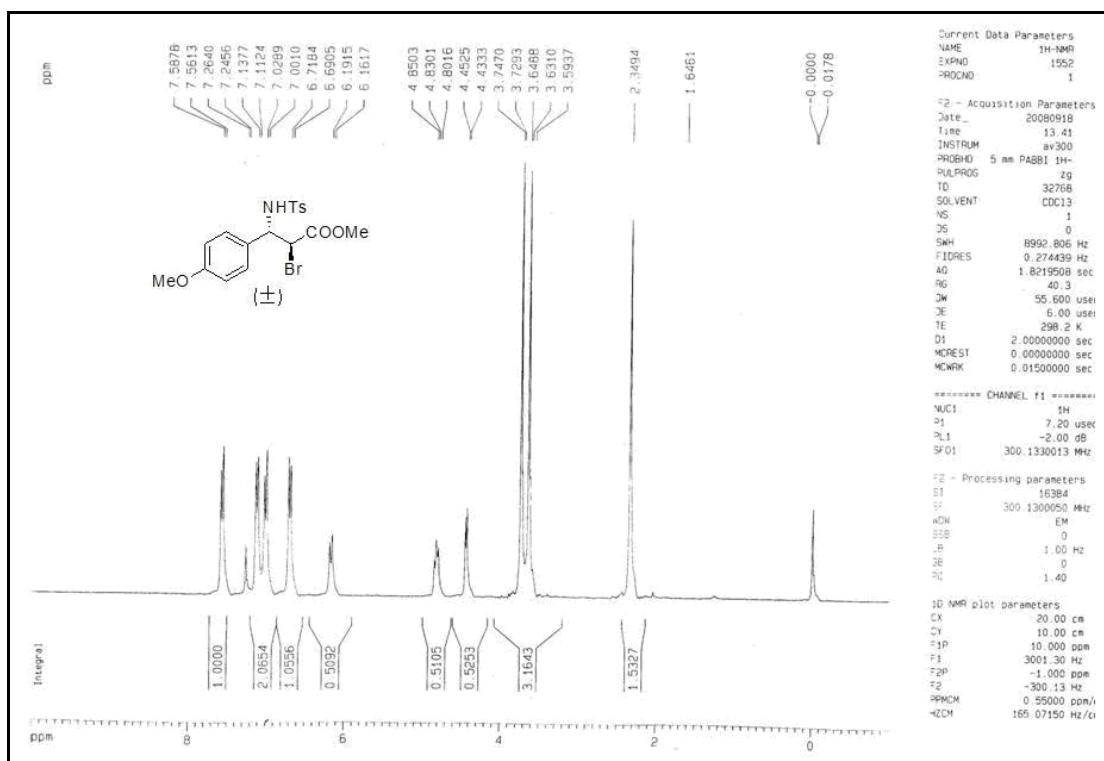


Figure 17. <sup>1</sup>H NMR spectrum of 22c

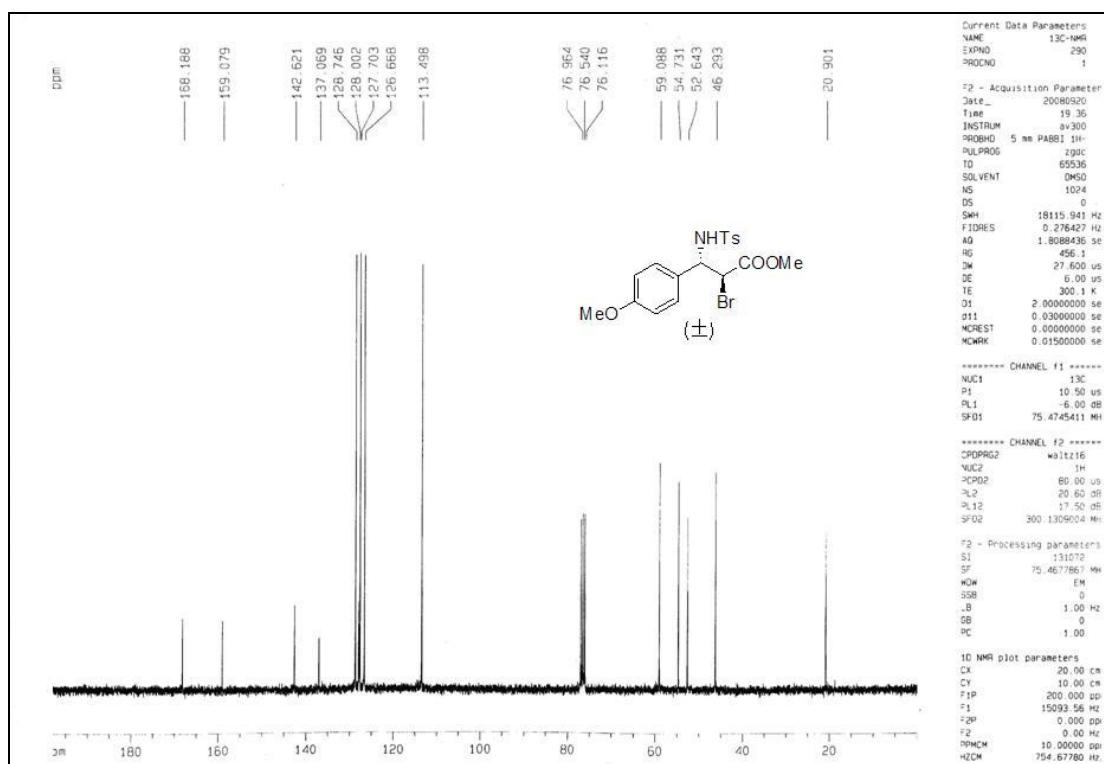
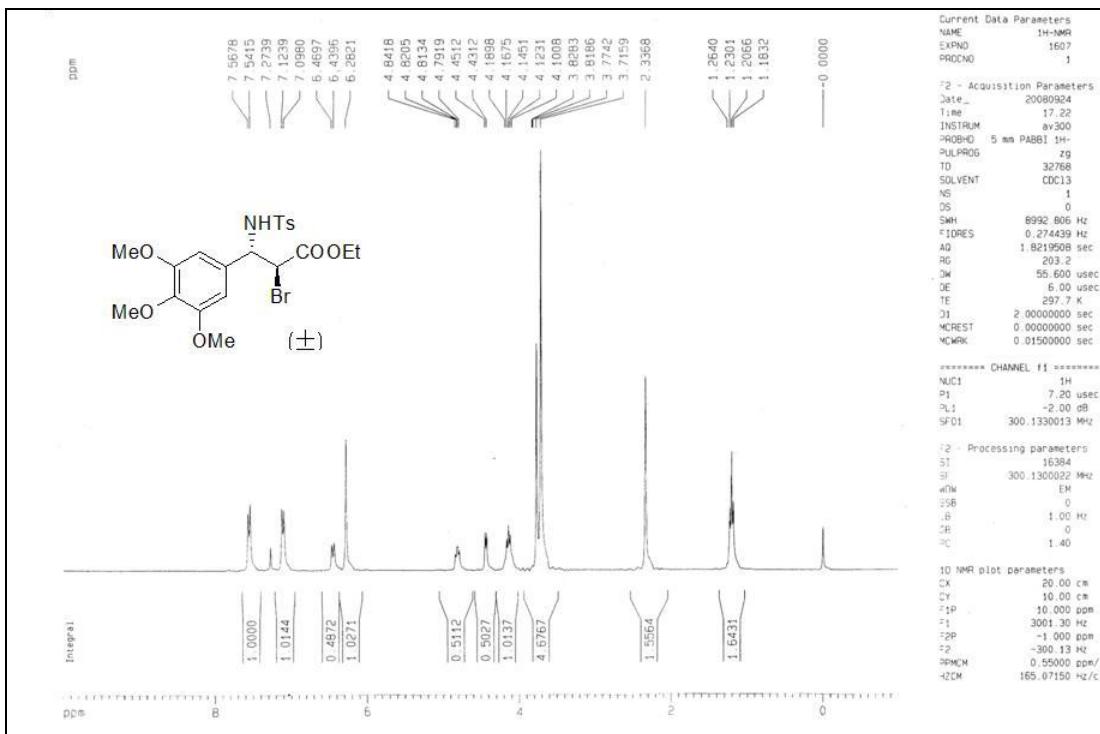
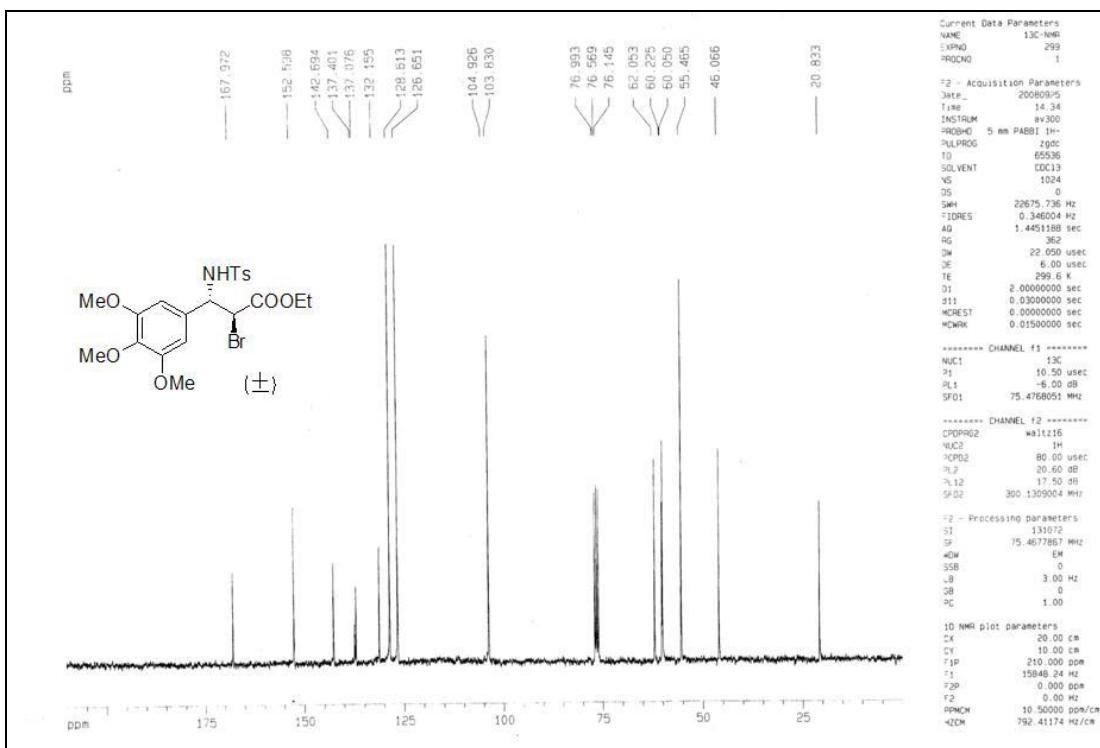


Figure 18. <sup>13</sup>C NMR spectrum of 22c



**Figure 19.**  $^1\text{H}$  NMR spectrum of **24c**



**Figure 20.**  $^{13}\text{C}$  NMR spectrum of **24c**

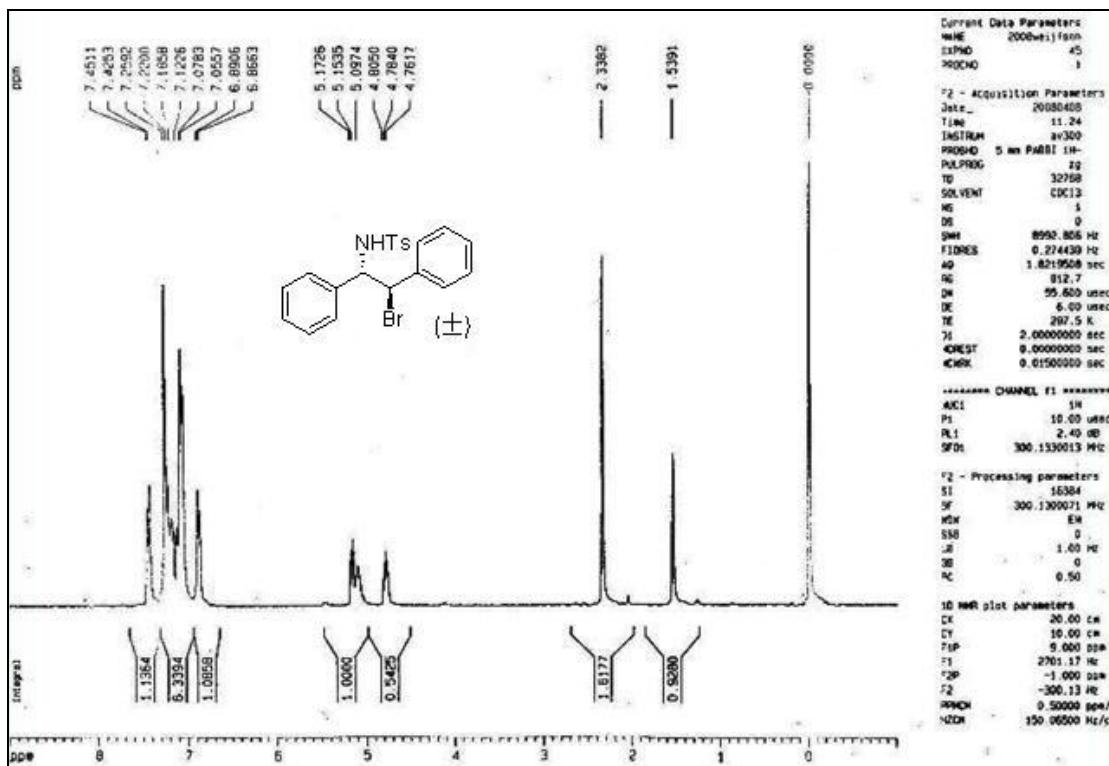


Figure 21. <sup>1</sup>H NMR spectrum of 29b

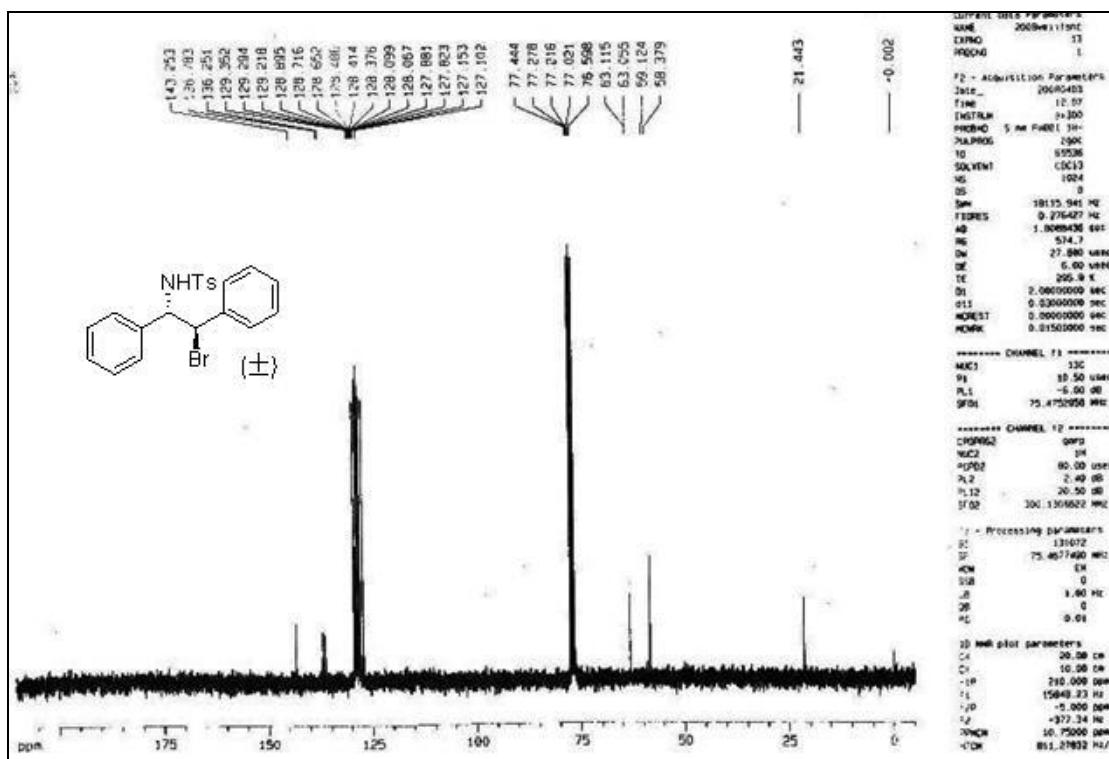


Figure 22. <sup>13</sup>C NMR spectrum of 29b

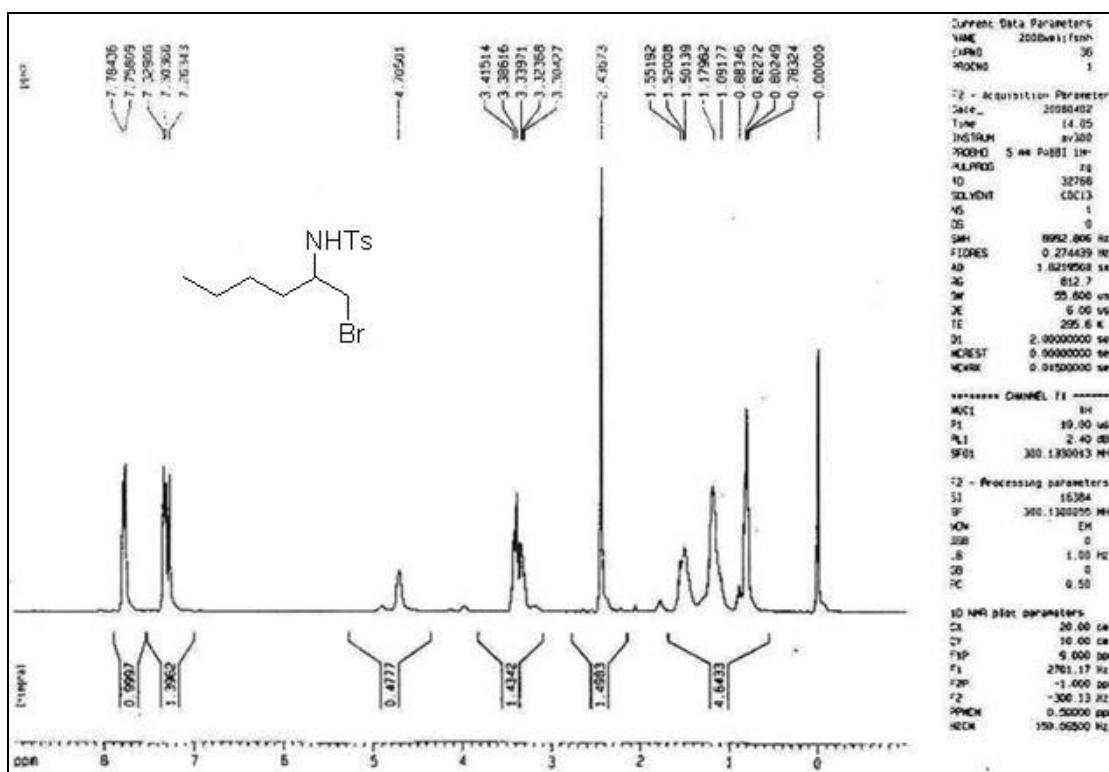


Figure 23. <sup>1</sup>H NMR spectrum of 33b

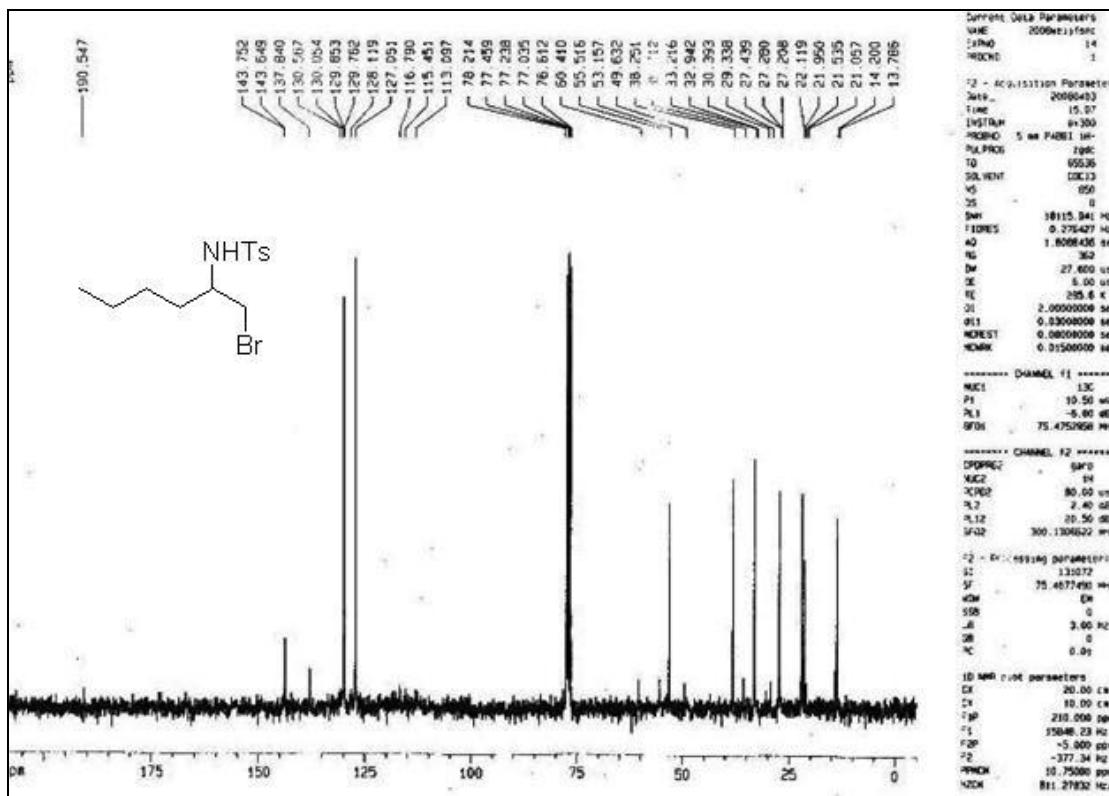
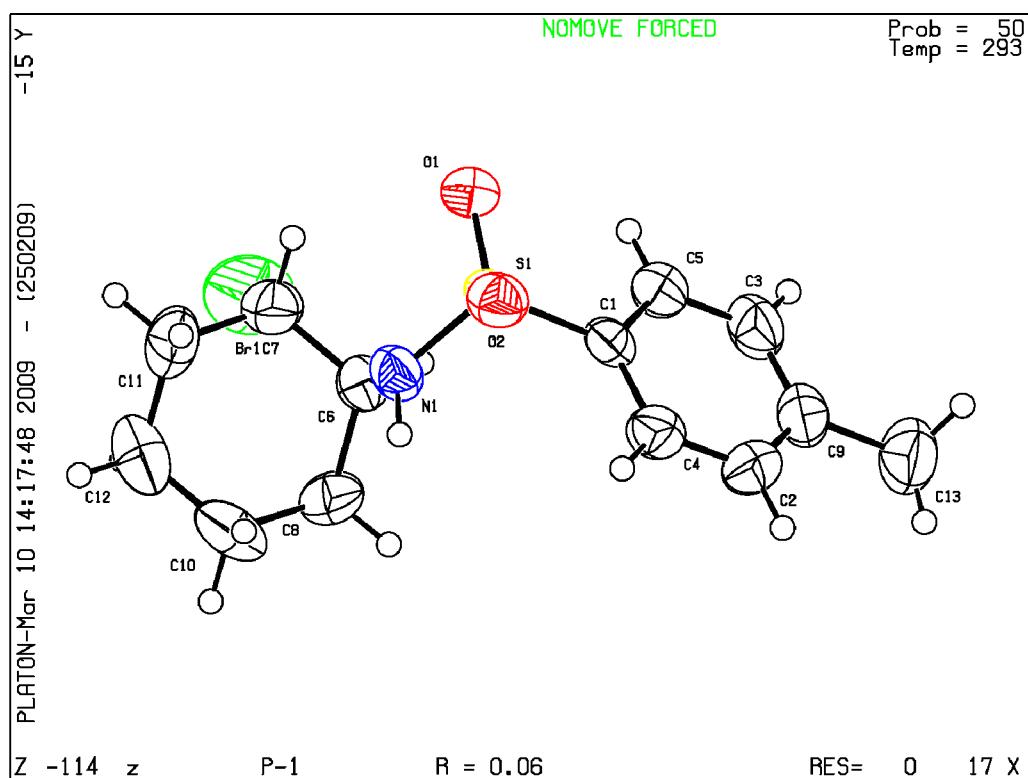


Figure 24. <sup>13</sup>C NMR spectrum of 33b



**Figure 25** X-ray structure for 31b