

Electronic Supplementary Information

Entitled

**Extremely Active α -Olefin Polymerization and Copolymerization with Ethylene
Catalyzed by dMAO-Activated Zirconium(IV) Dichloro Complex Having an
[OSSO]-Type Ligand**

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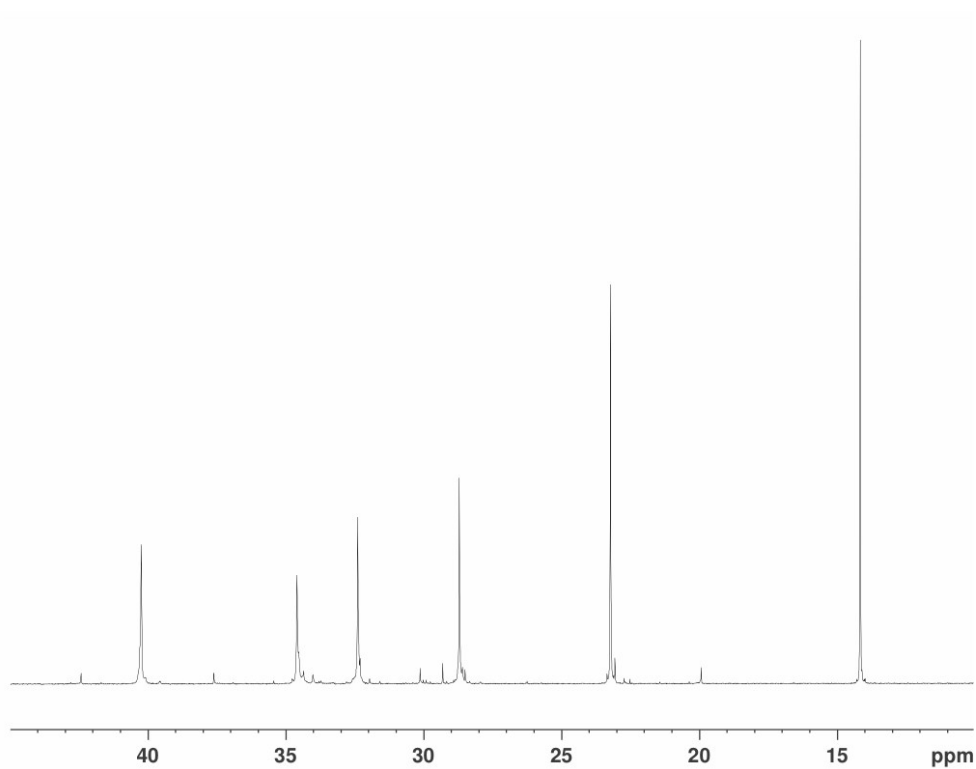


Figure S1. $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of poly(1-hexene) at 25 °C (Table 1, Run 1).

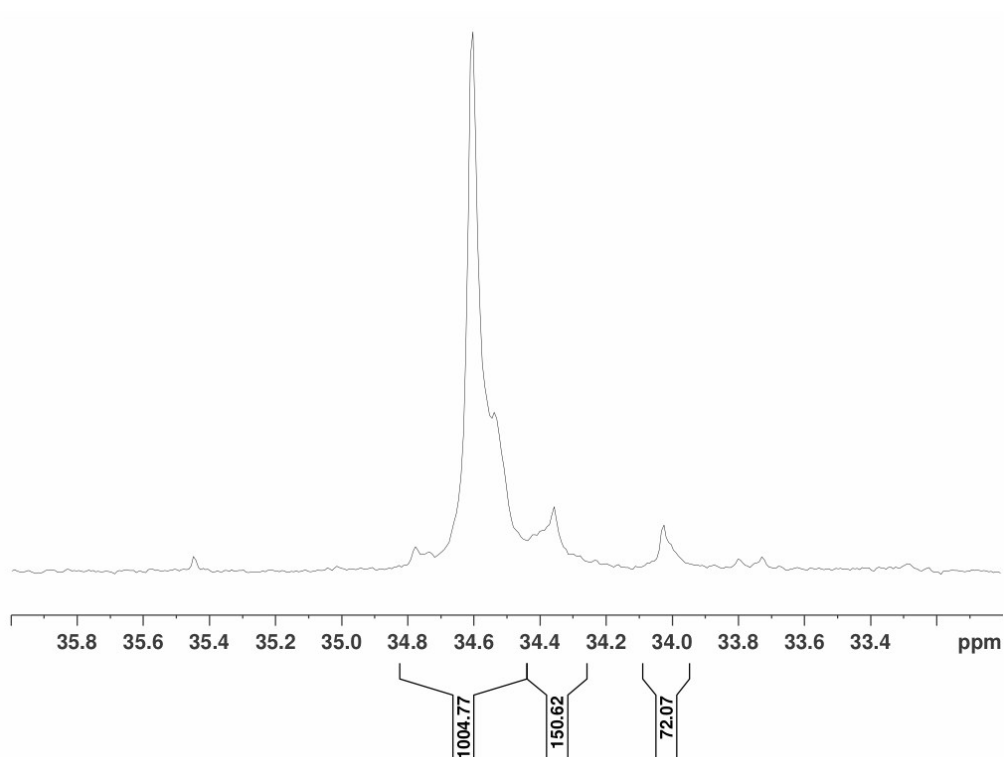


Figure S2. $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of poly(1-hexene) at 25 °C (Table 1, Run 1).

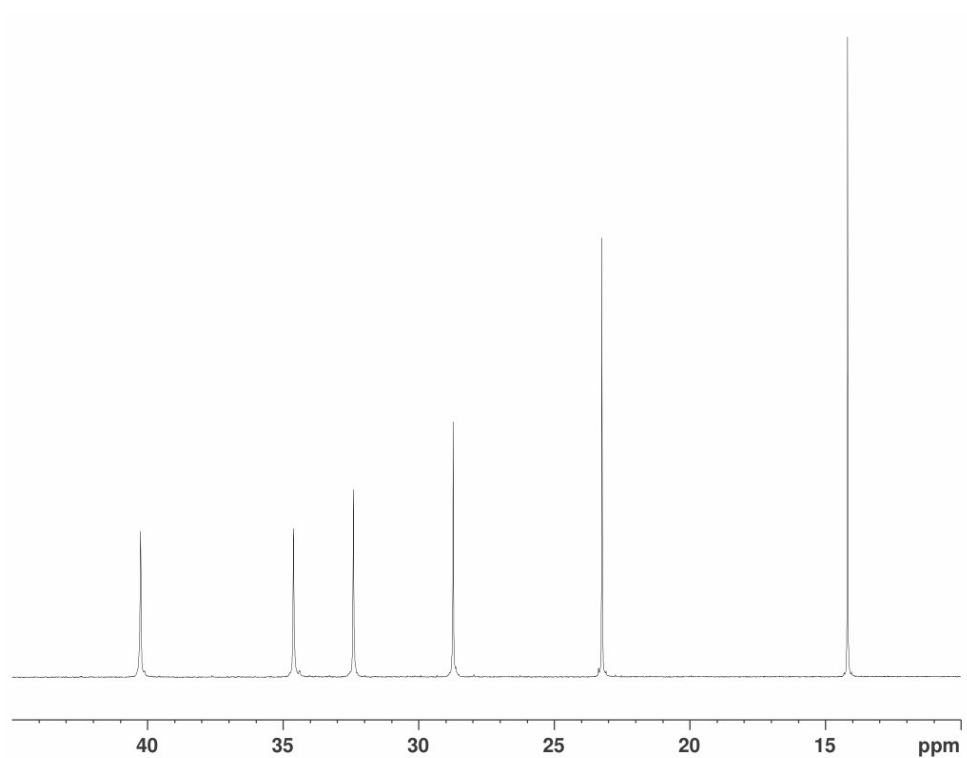


Figure S3. $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of poly(1-hexene) at 0 °C (Table 1, Run 3).

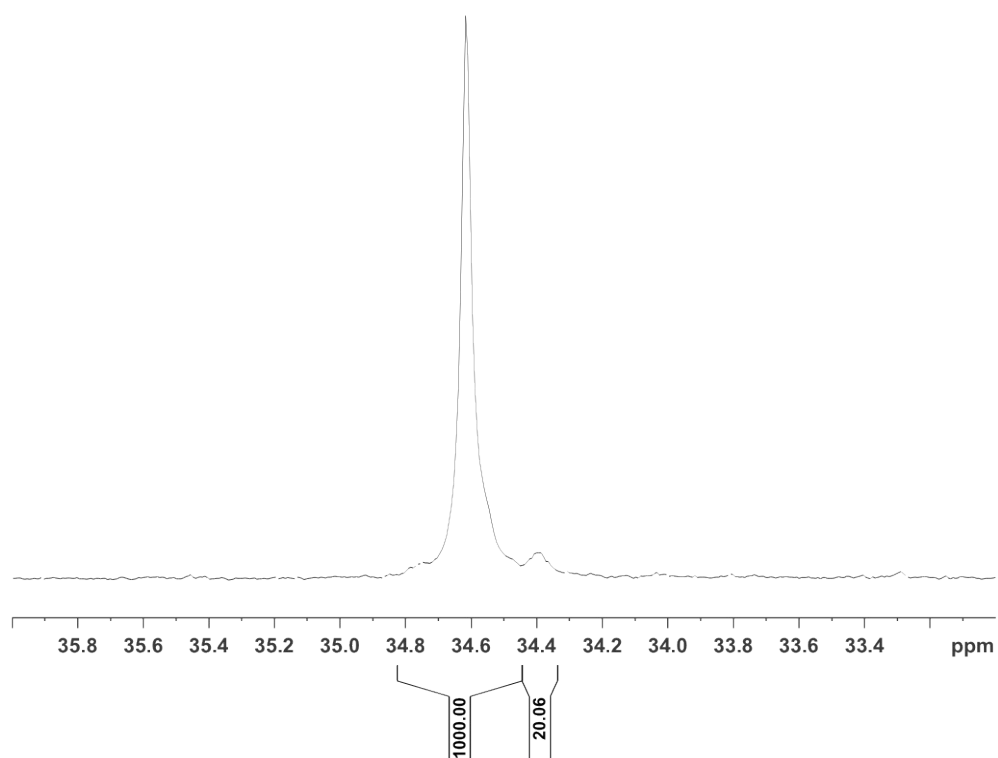


Figure S4. $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of poly(1-hexene) at 0 °C (Table 1, Run 3).

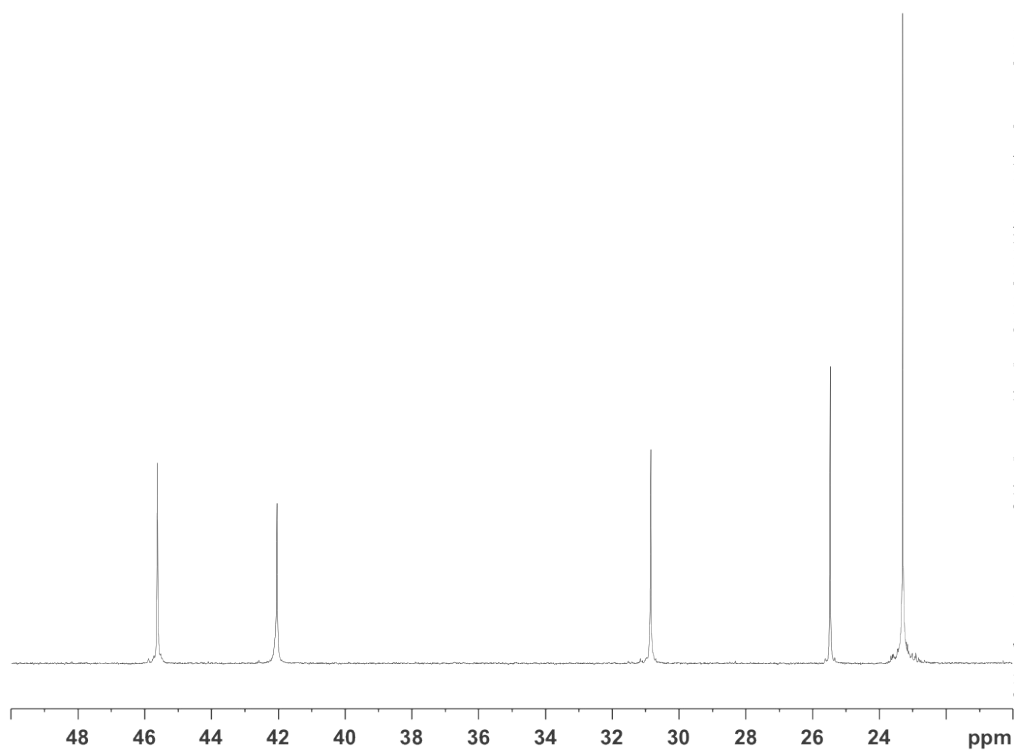


Figure S5. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of poly(4-MP) at 25 °C (Table 2, Run 1).

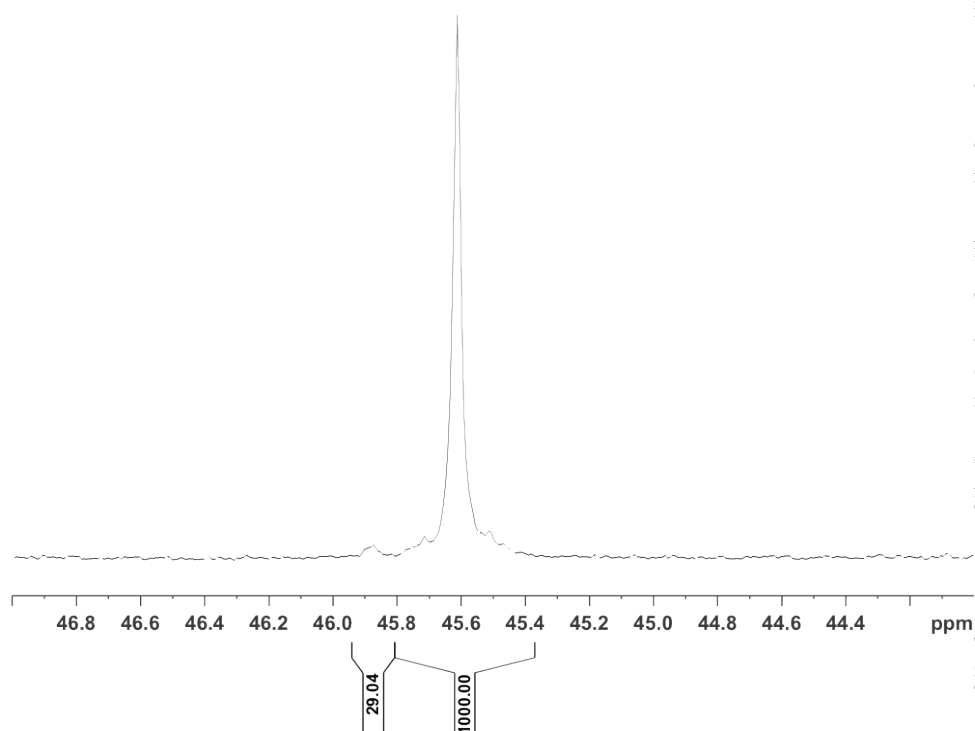


Figure S6. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of poly(4-MP) at 25 °C (Table 2, Run 1).

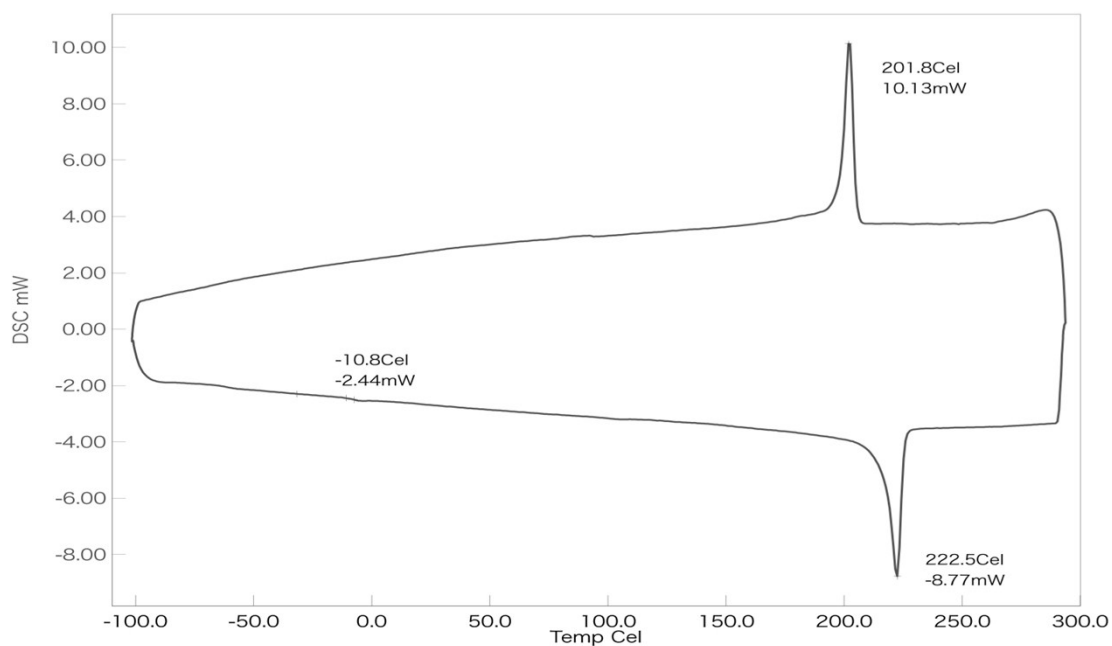


Figure S7. GPC curves of poly(4-MP) at 25 °C (Table 2, Run 1).

Figure S8. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of poly(4-MP) at 40 °C (Table 2, Run 2).

Figure S9. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of poly(4-MP) at 40 °C (Table 2, Run 2).

Figure S10. GPC curves of poly(4-MP) at 40 °C (Table 2, Run 2).

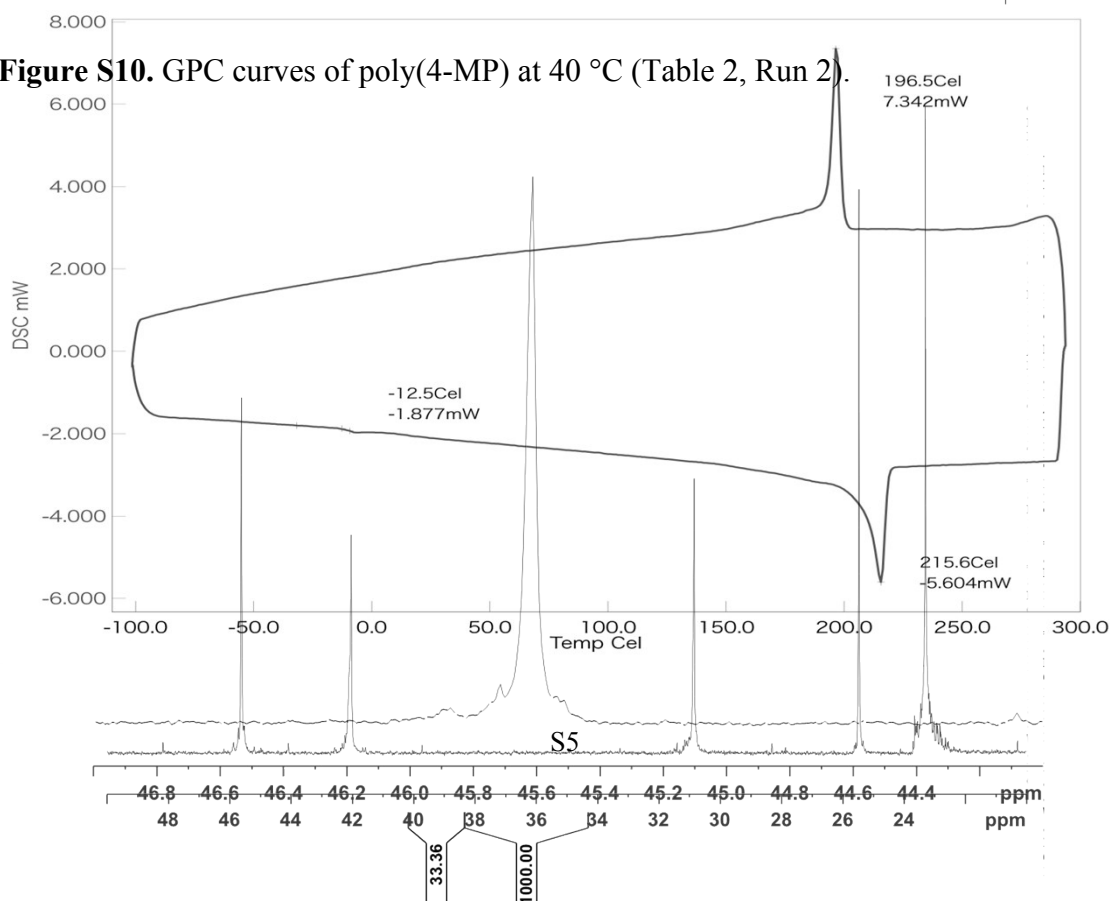


Figure S11. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of poly(4-MP) at 70 °C (Table 2, Run 3).

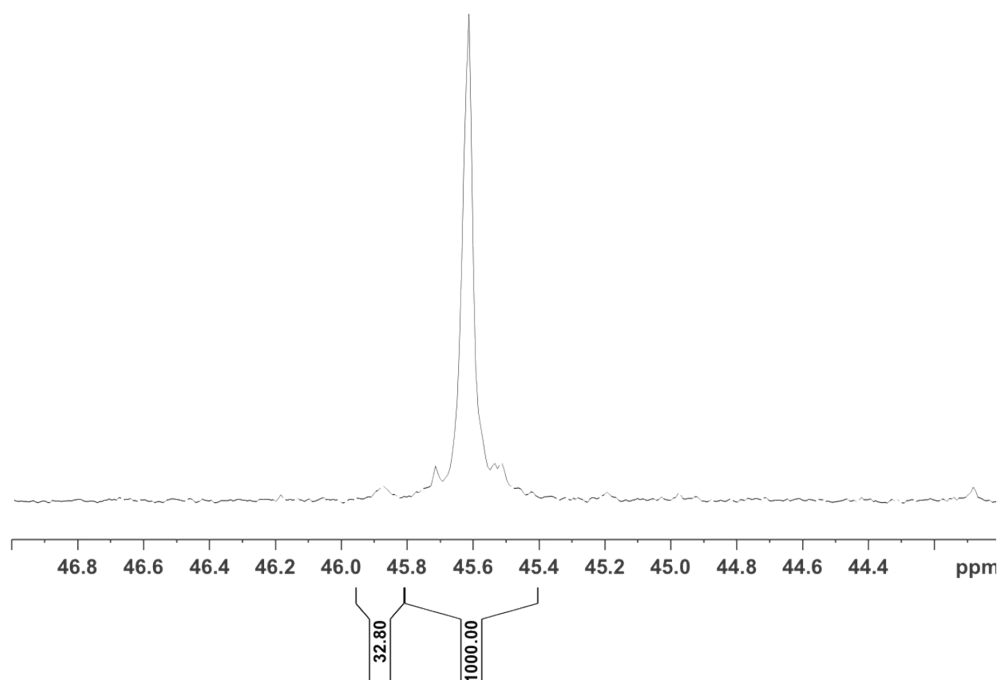


Figure S12. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of poly(4-MP) at 70 °C (Table 2, Run 3).

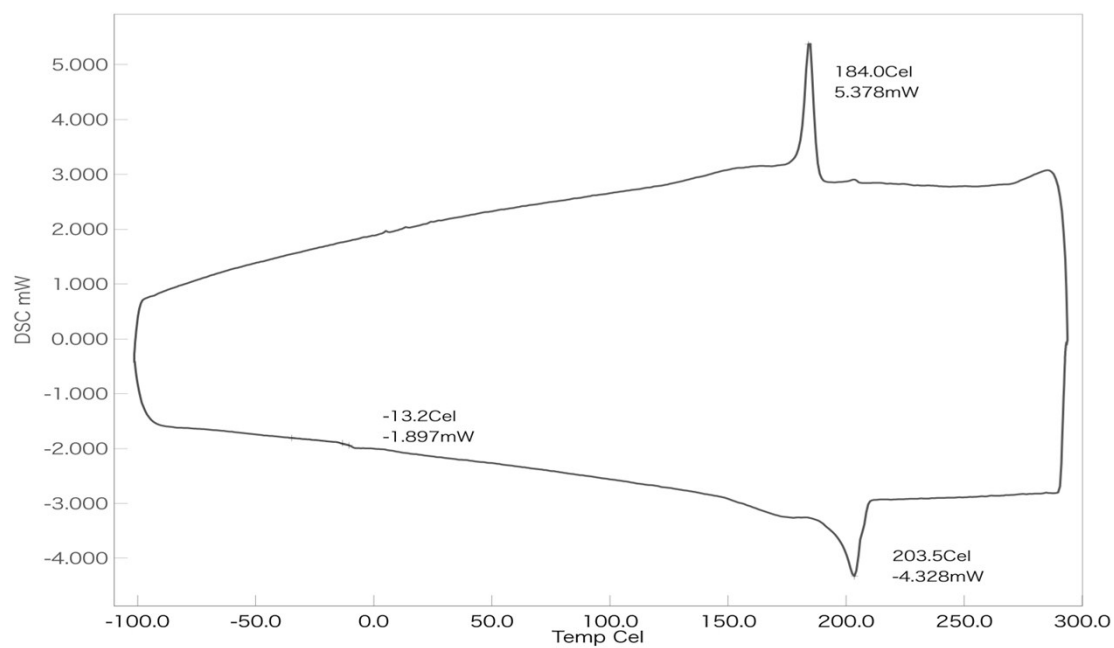


Figure S13. GPC curves of poly(4-MP) at 70 °C (Table 2, Run 3).

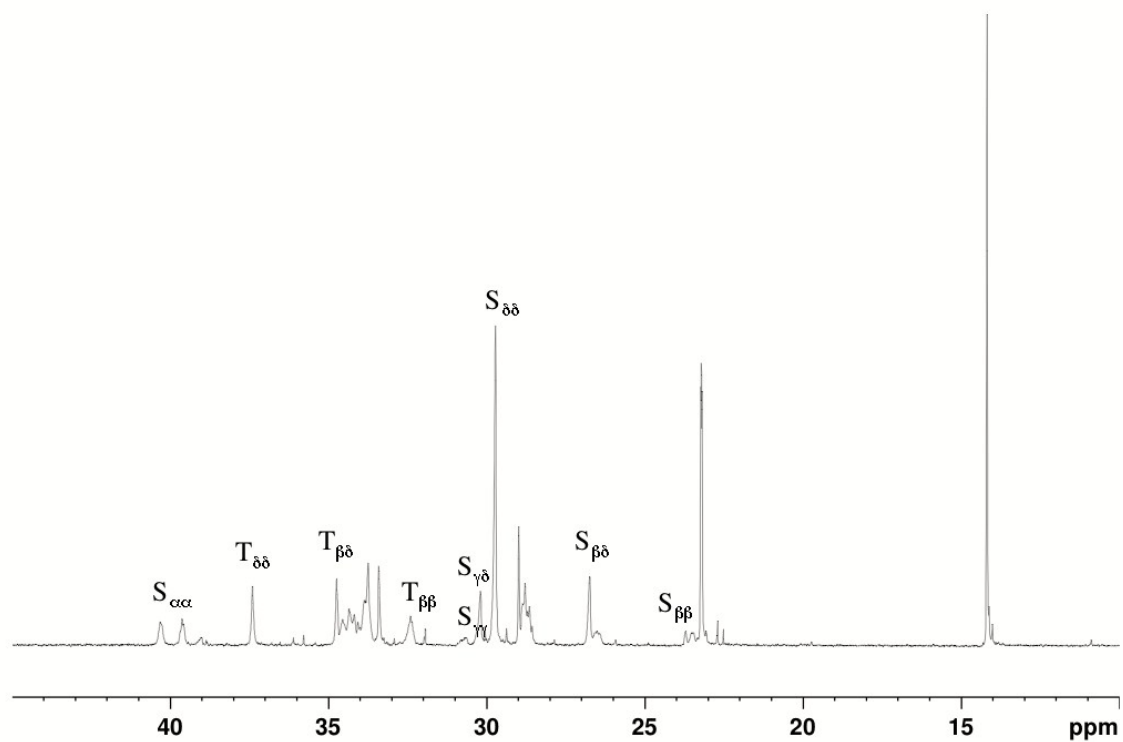


Figure S14. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of ethylene/1-hexene copolymer (Table 3, Run 1).

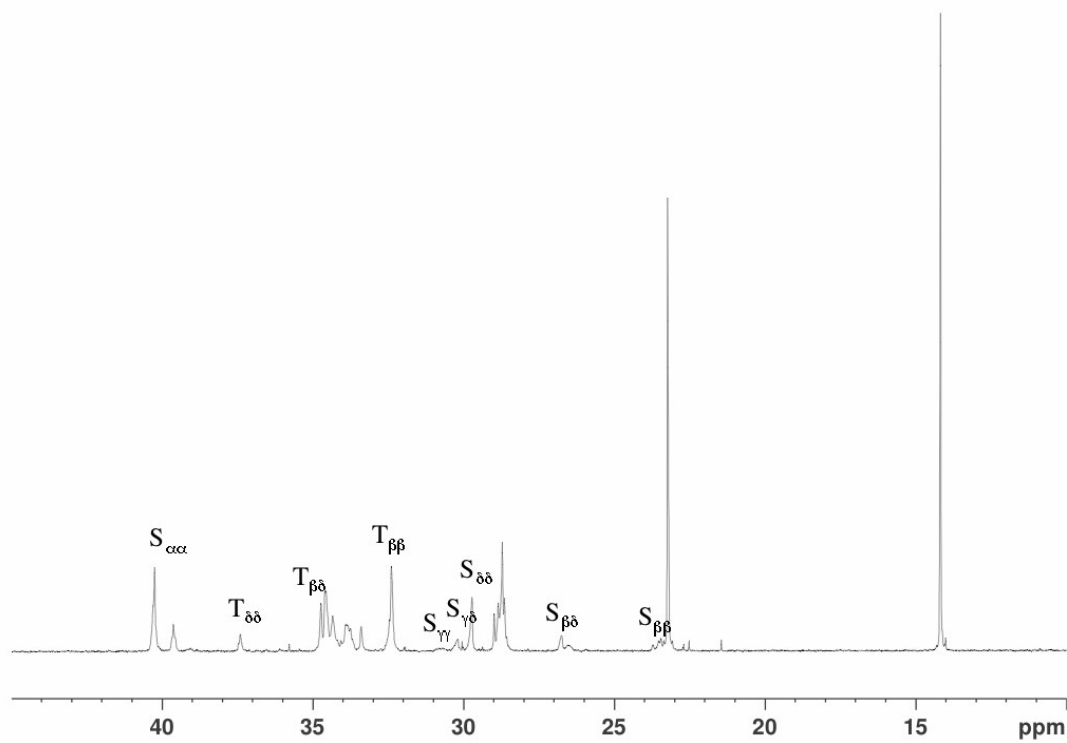


Figure S15. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of ethylene/1-hexene copolymer (Table 3, Run 2).

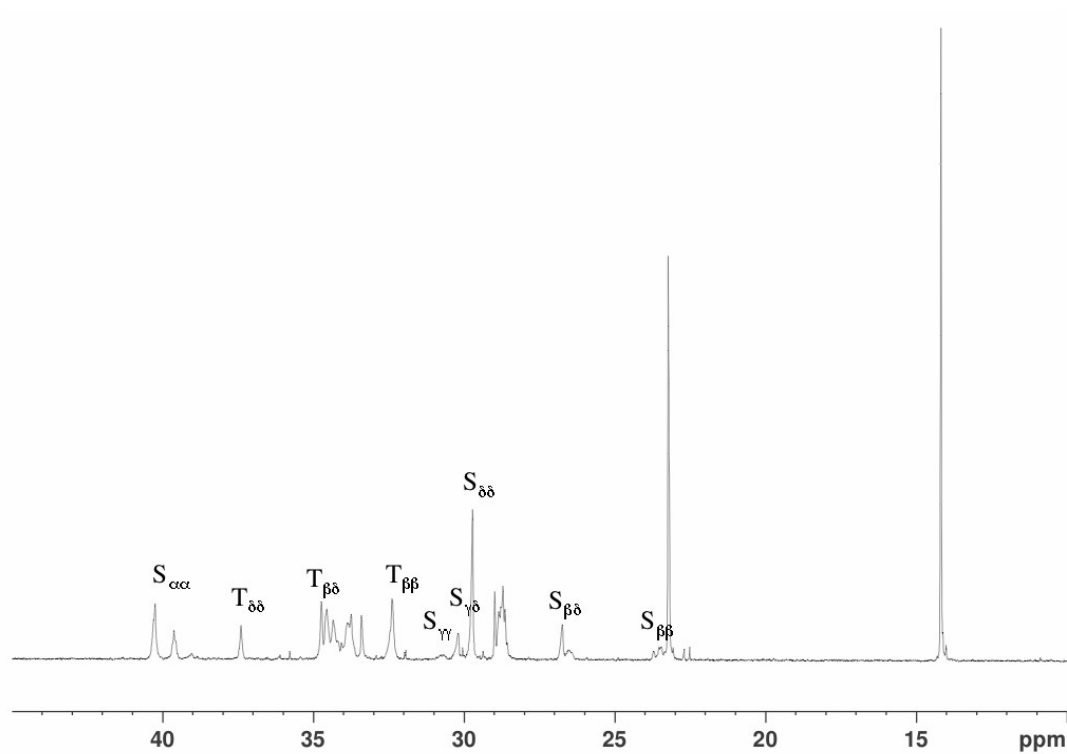


Figure S16. $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of ethylene/1-hexene copolymer (Table 3, Run 3).