

Supporting Information for

Hydrogen-transfer and condensation-addition polymerizations of acrylic acid

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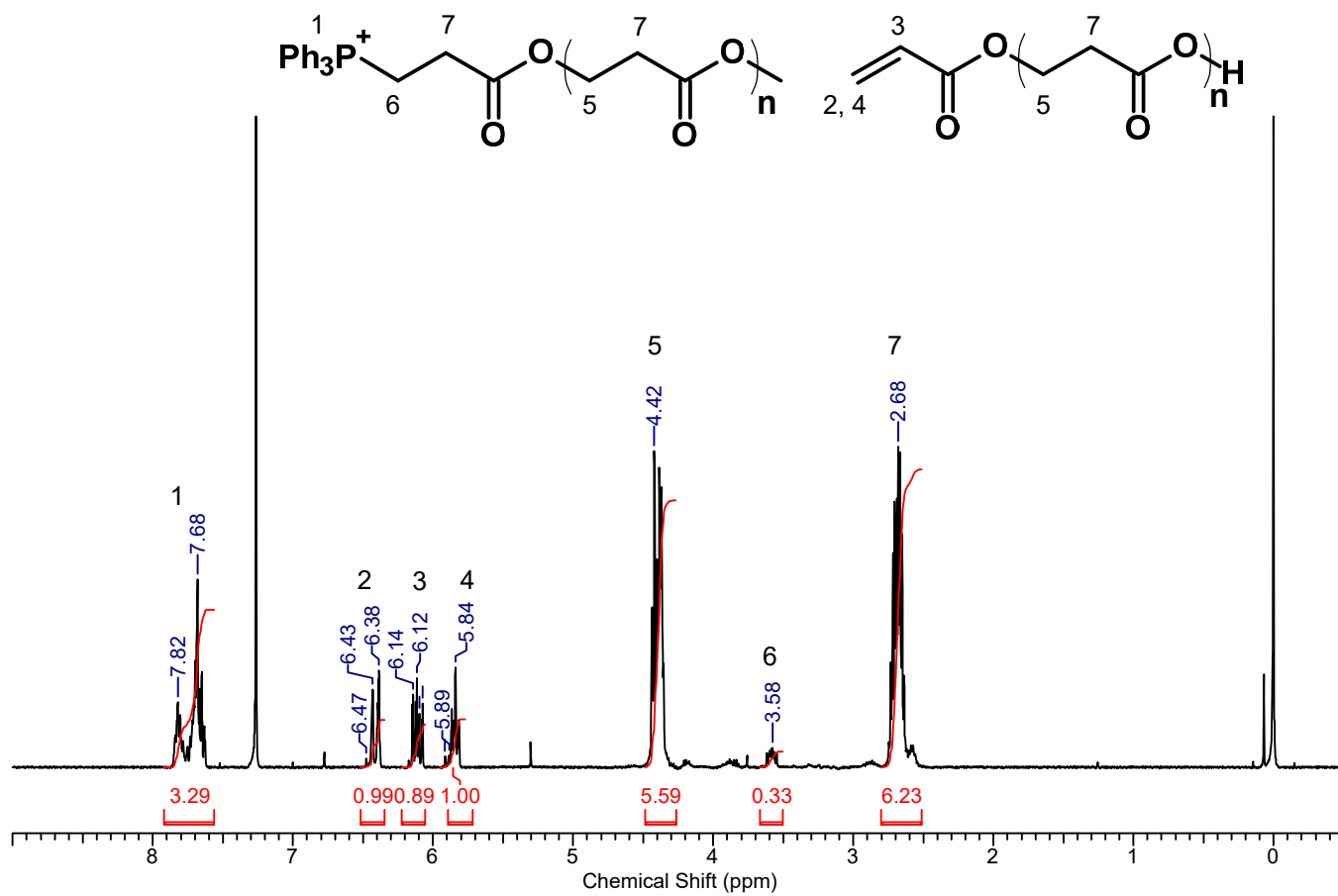


Figure S1. ¹H NMR spectrum of Poly(AA) obtained by Ph₃P (Entry 1 in Table 1)

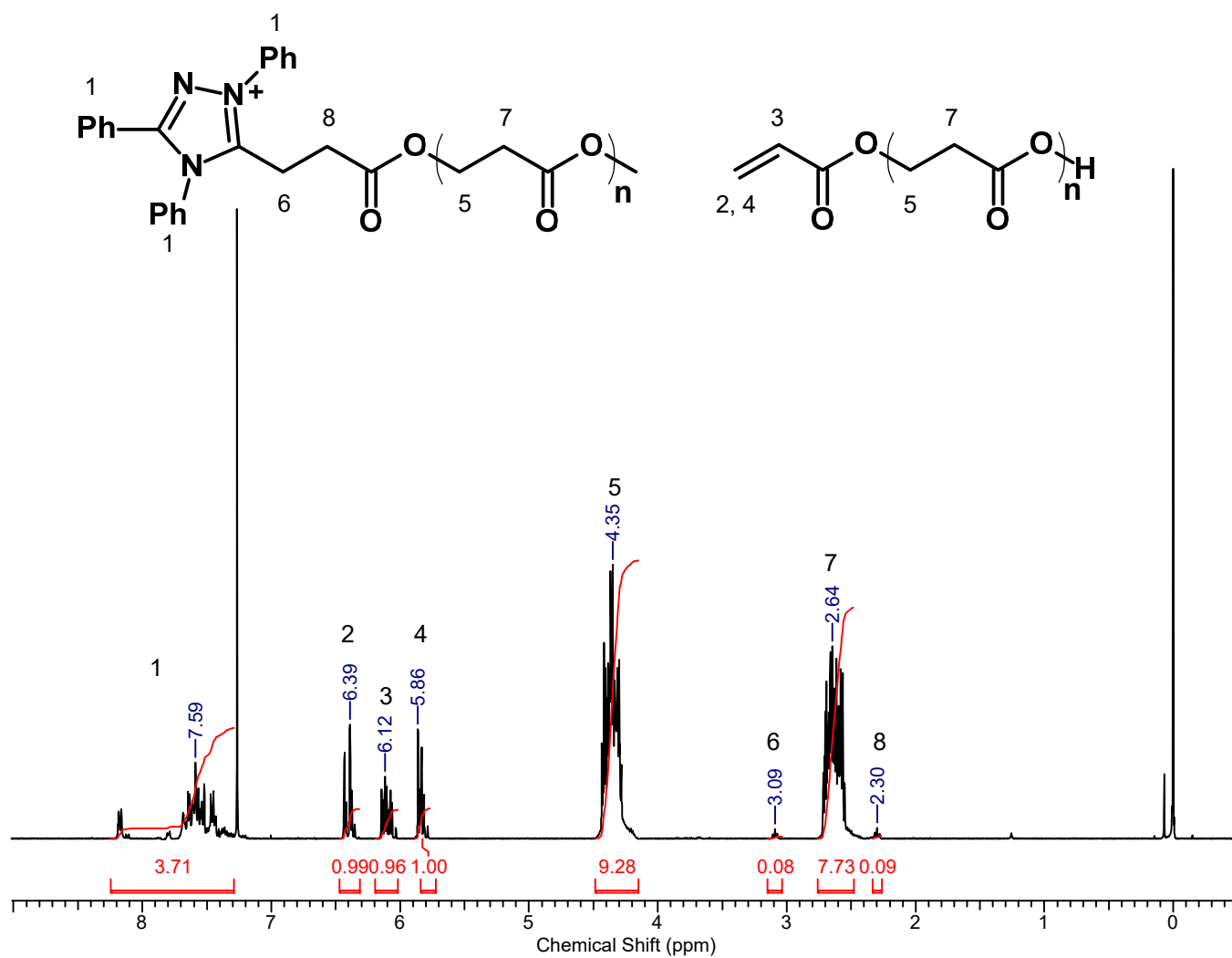


Figure S2. ¹H NMR spectrum of Poly(AA) obtained by TPT (Entry 5 in Table 1)

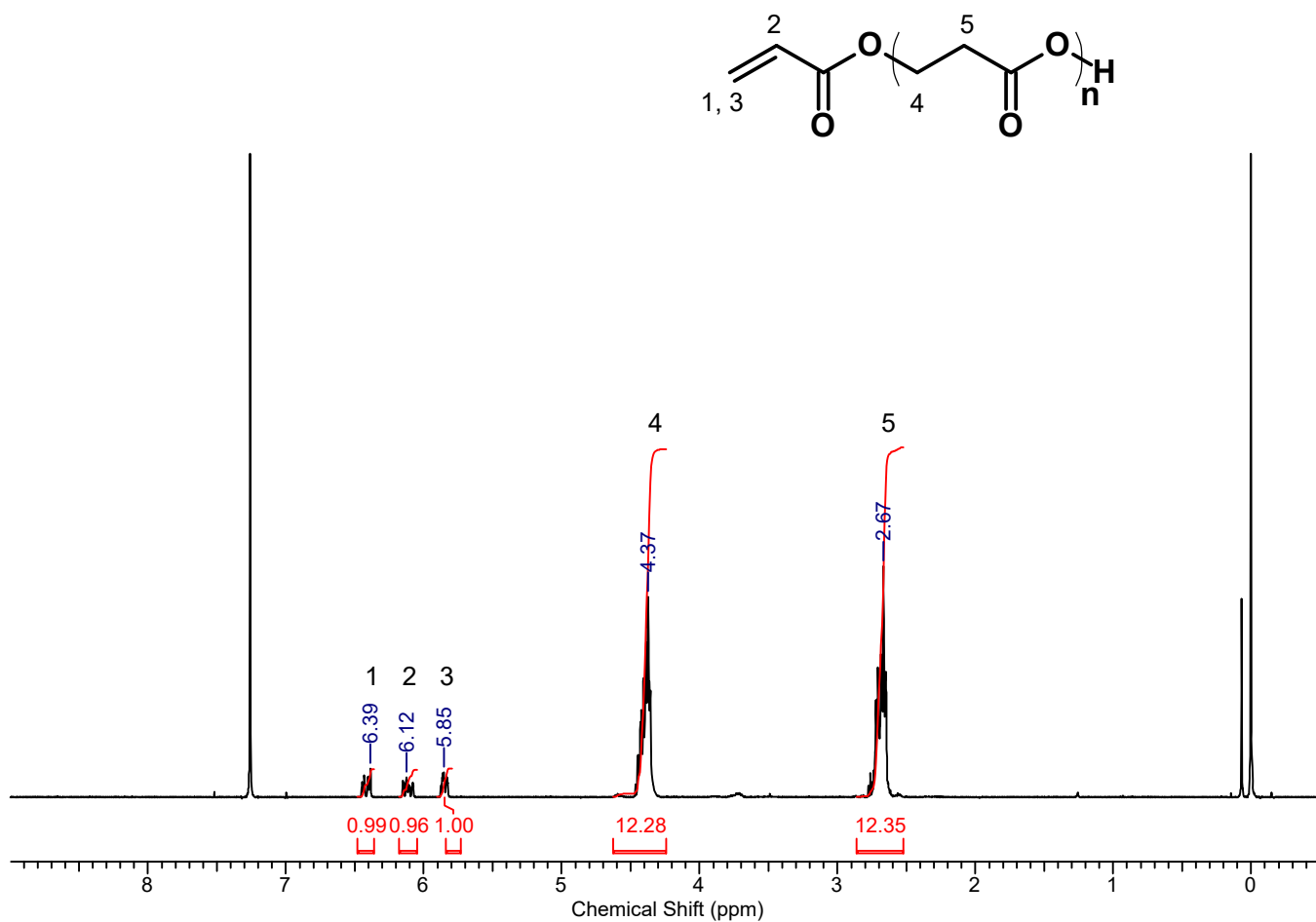


Figure S3. ¹H NMR spectrum of Poly(AA) obtained by DNBS (Entry 13 in Table 1)

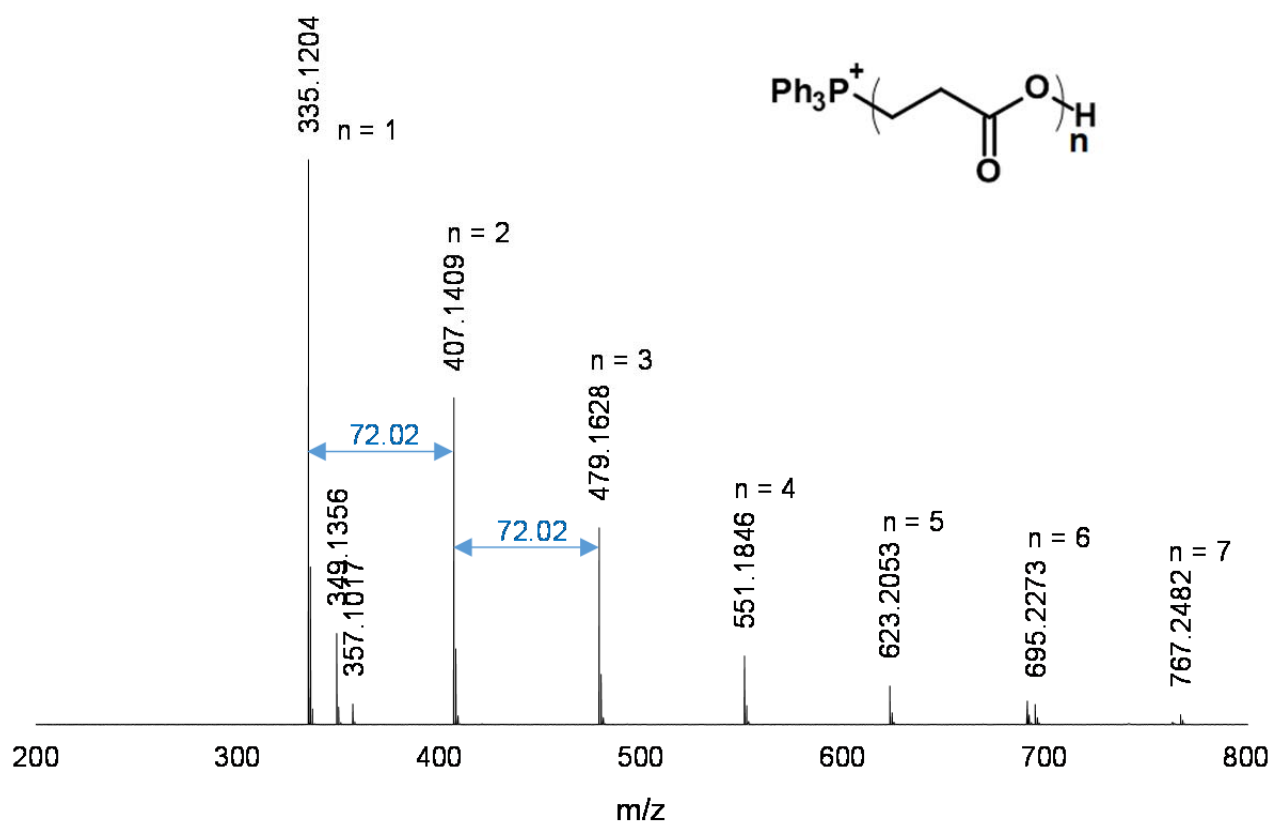


Figure S4. ESI-MS spectrum of Poly(AA) obtained by Ph_3P (Entry 1 in Table 1)

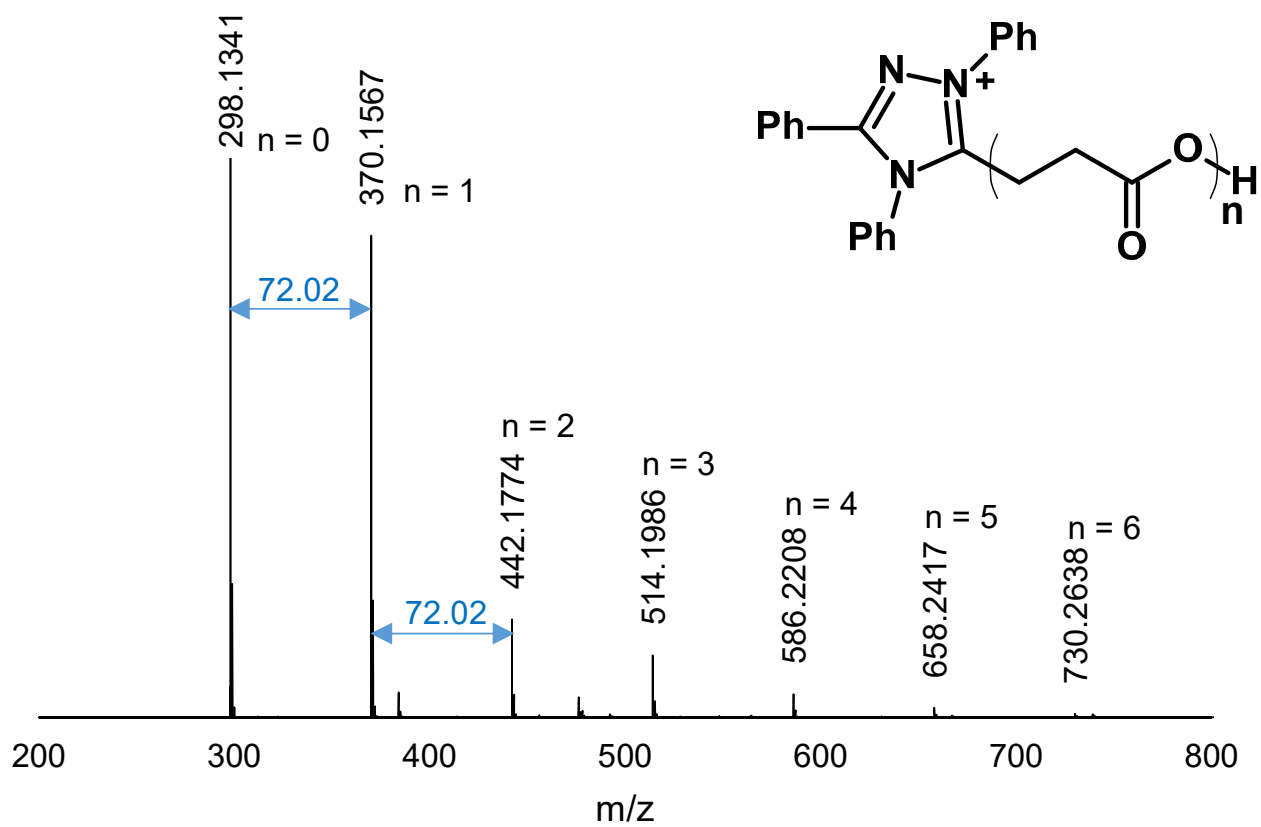


Figure S5. ESI-MS spectrum of Poly(AA) obtained by TPT (Entry 5 in Table 1)

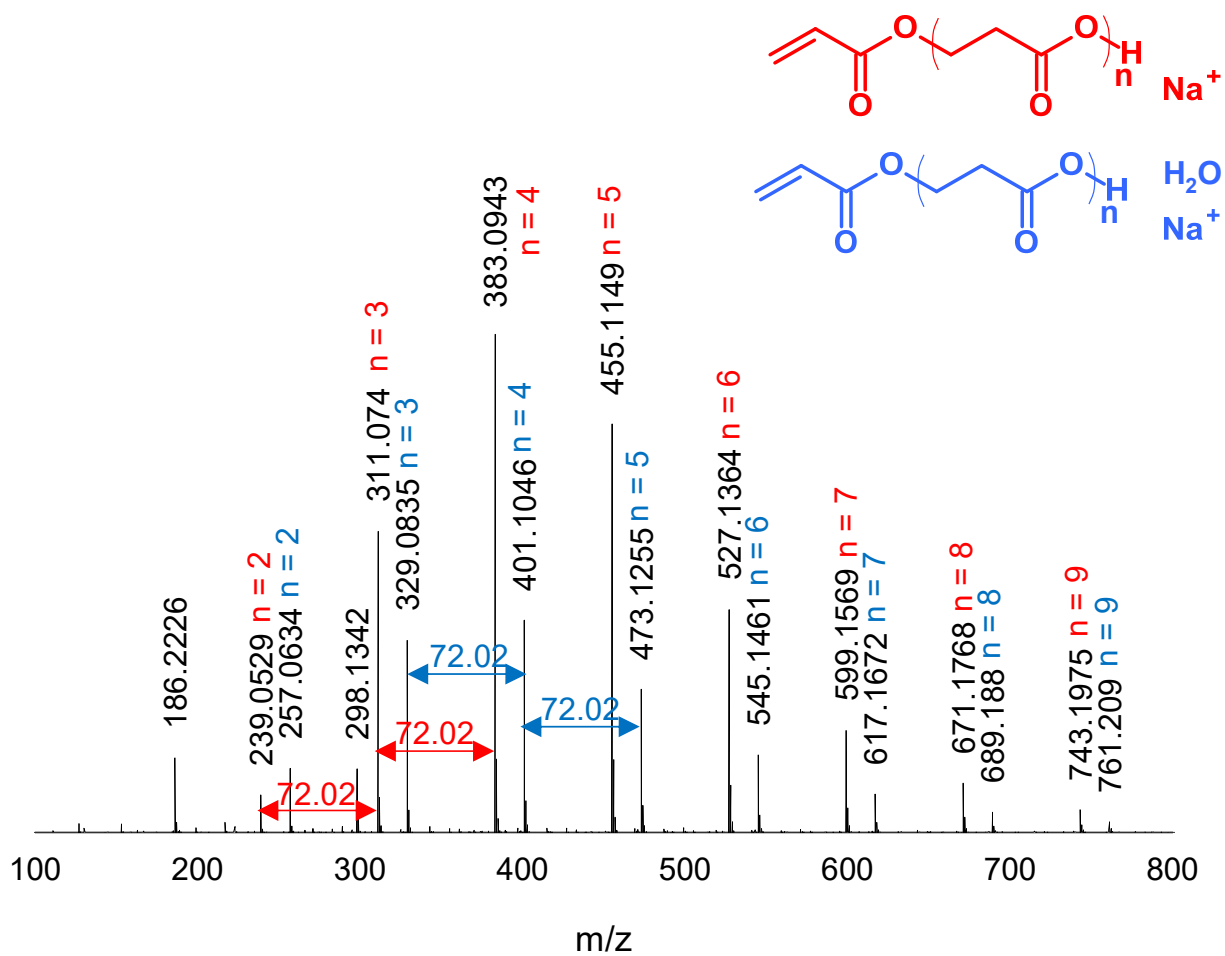


Figure S6. ESI-MS spectrum of Poly(AA) obtained by DNBS (Entry 12 in Table 1)

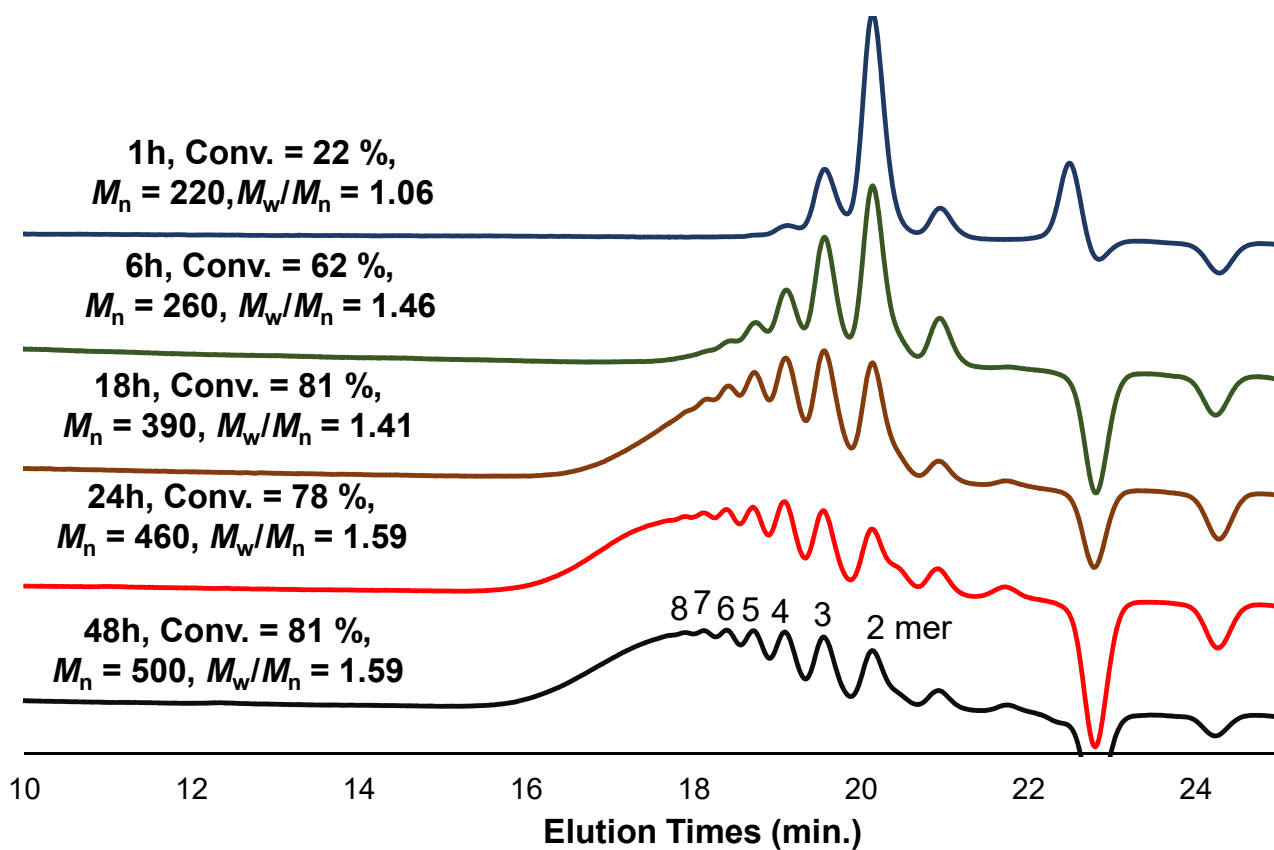


Figure S7. Time vs Conv. vs M_n : GPC profiles of poly(AA)s obtained by DNBS (5 mol%) at 100 °C

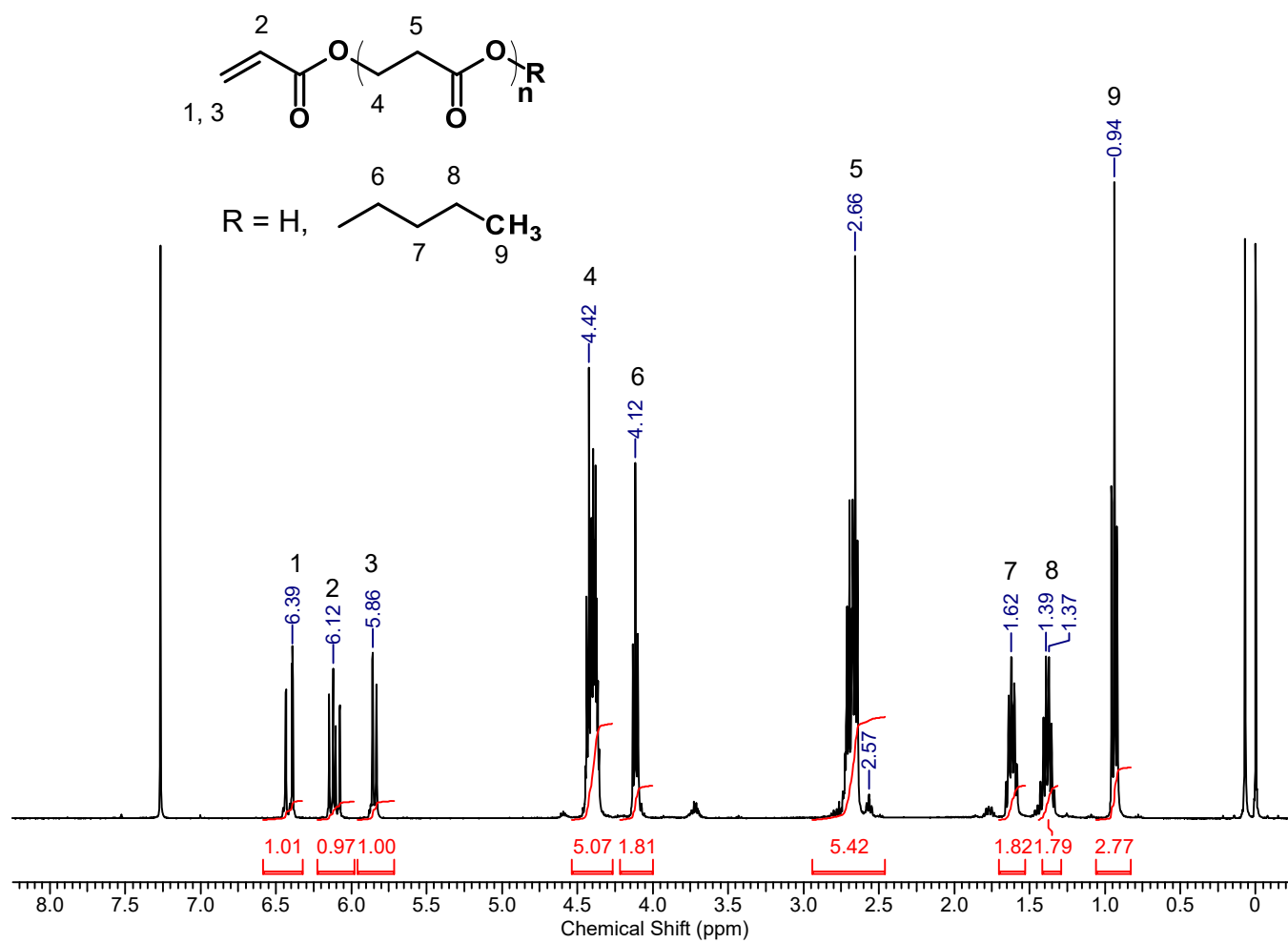


Figure S8. ^1H NMR spectrum of Poly(AA) end-capped with *n*-butyl acrylate (Scheme 2)

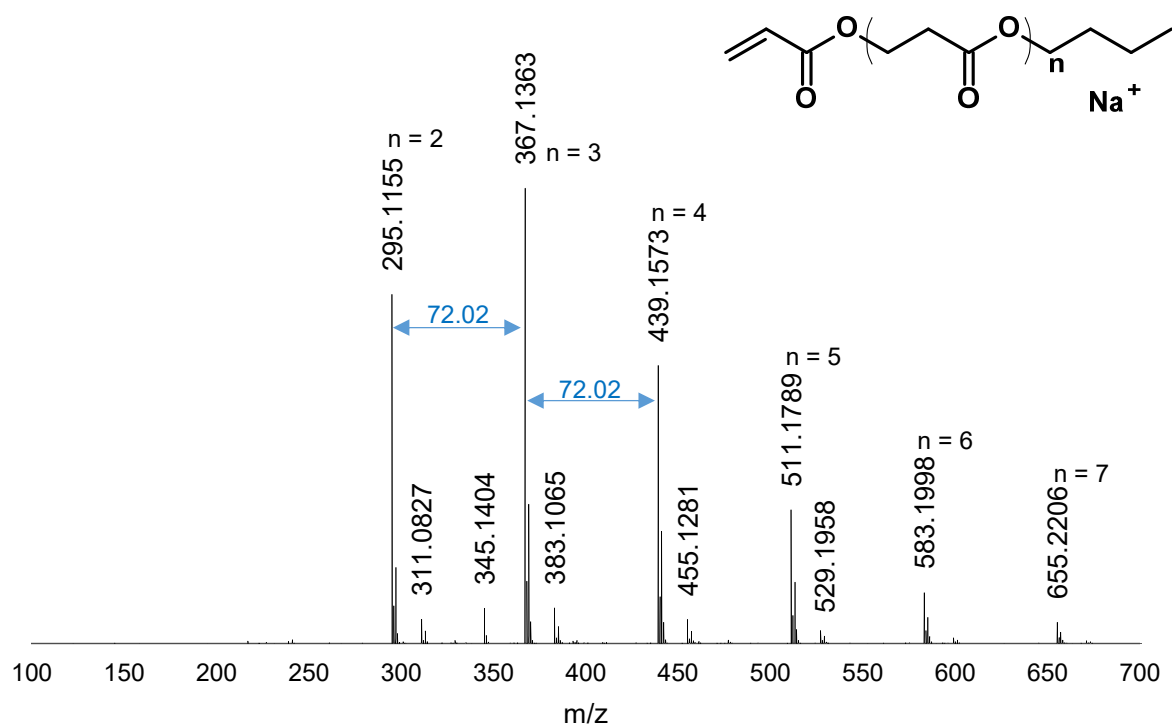


Figure S9. ESI-MS spectrum of Poly(AA) end-capped with *n*-butyl acrylate (Scheme 2)

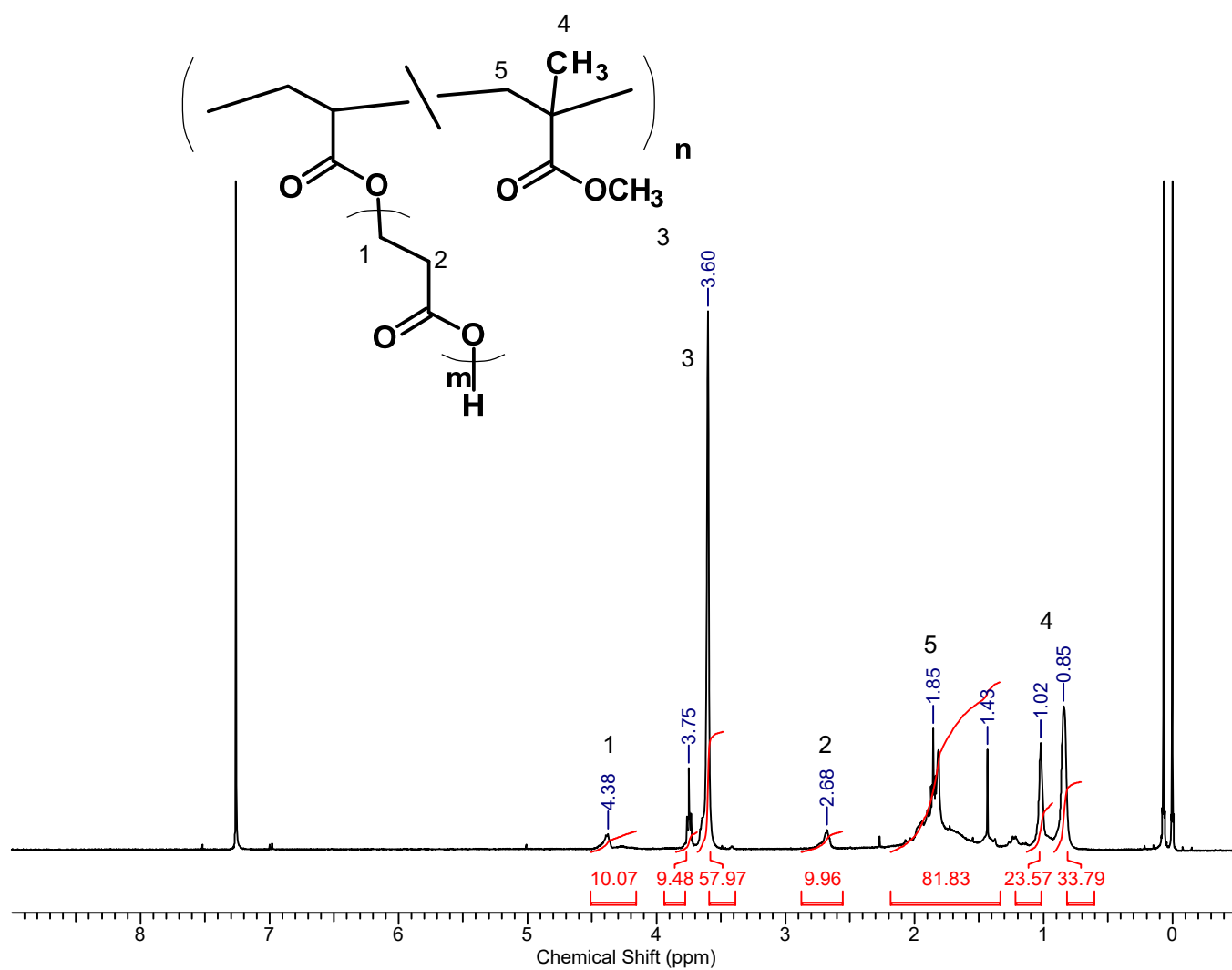


Figure S10. ¹H NMR spectrum of the graft copolymer (Entry 1 in Table 2)

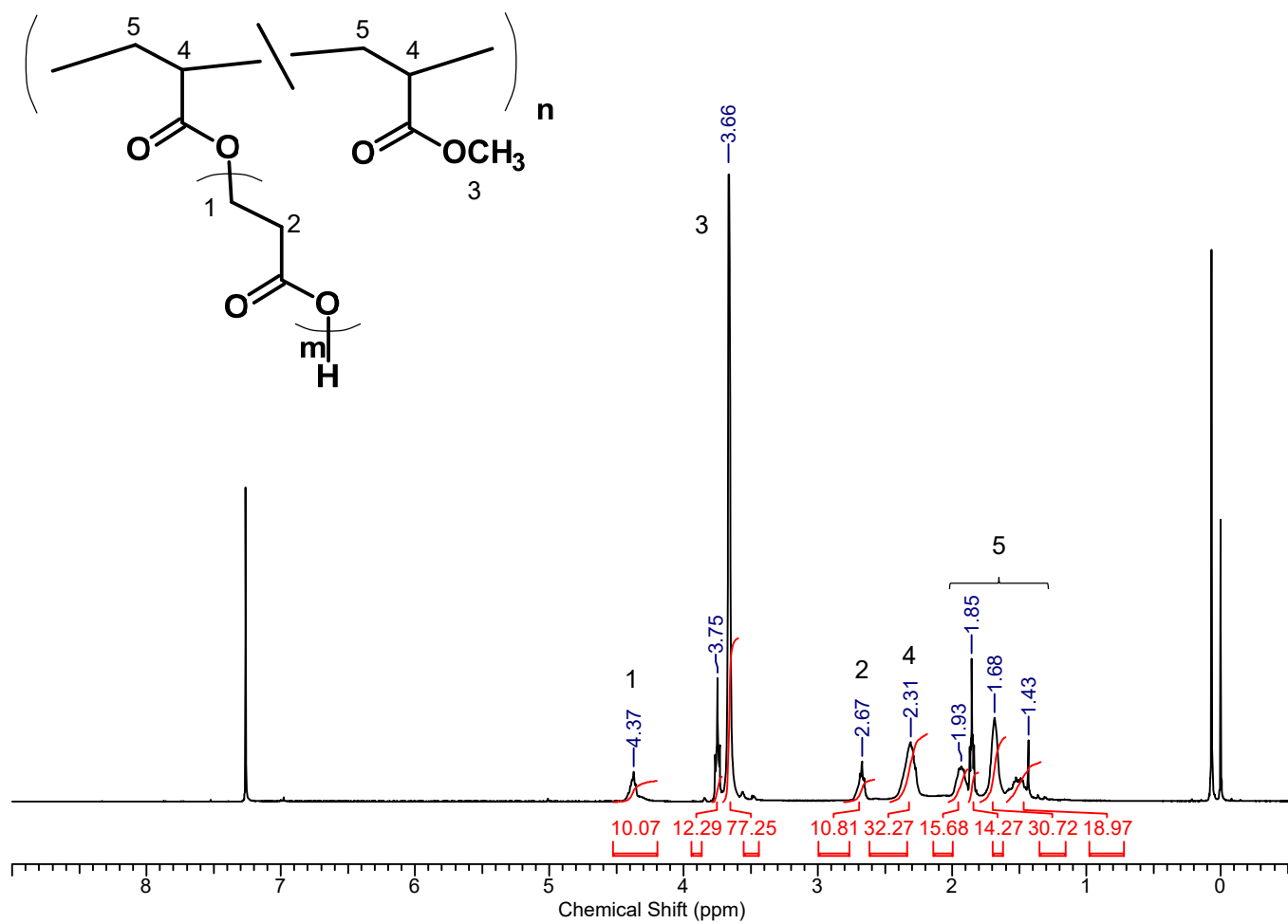


Figure S11. ¹H NMR spectrum of the graft copolymer (Entry 4 in Table 2)

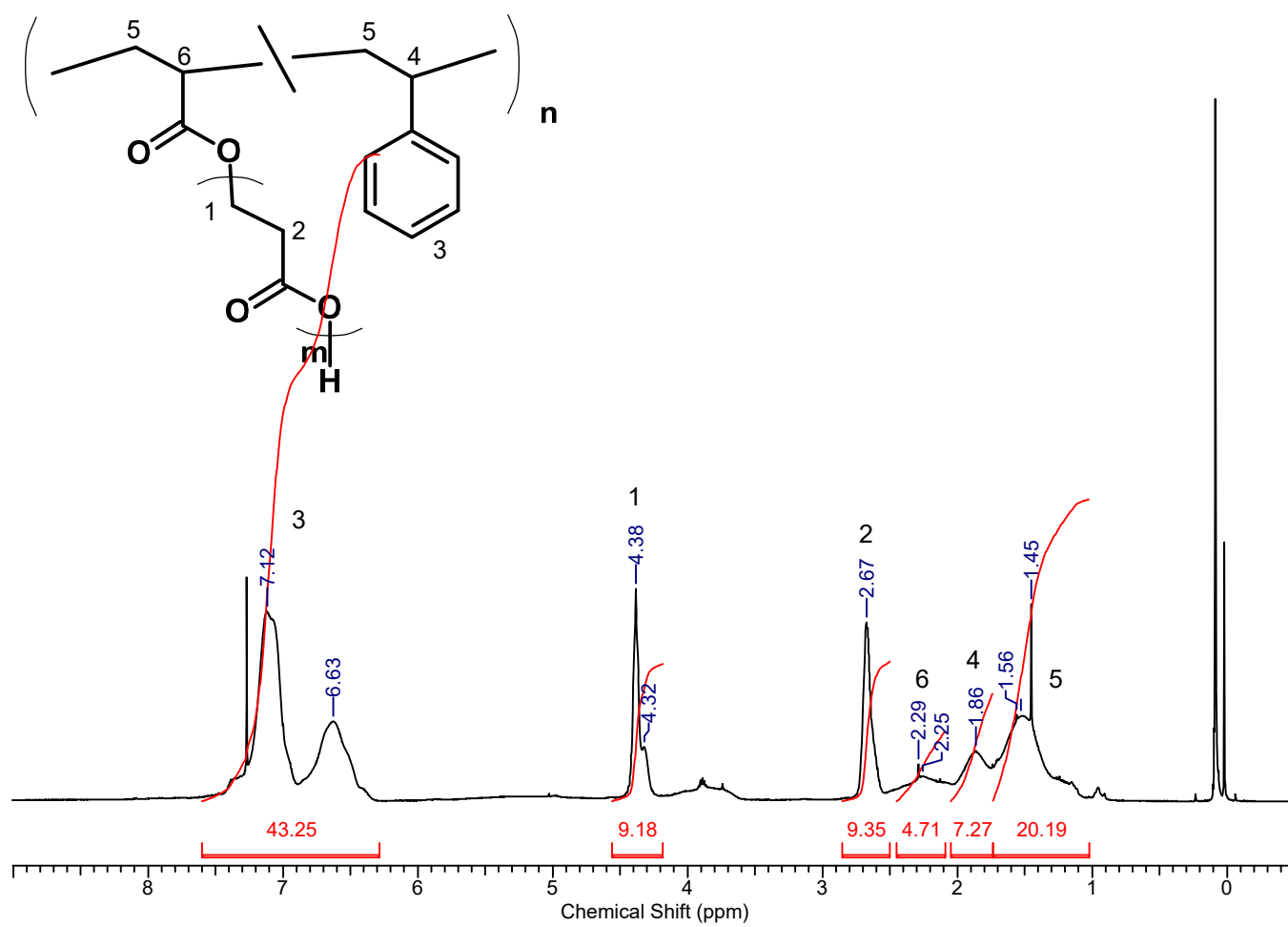


Figure S12. ¹H NMR spectrum of the graft copolymer (Entry 7 in Table 2)

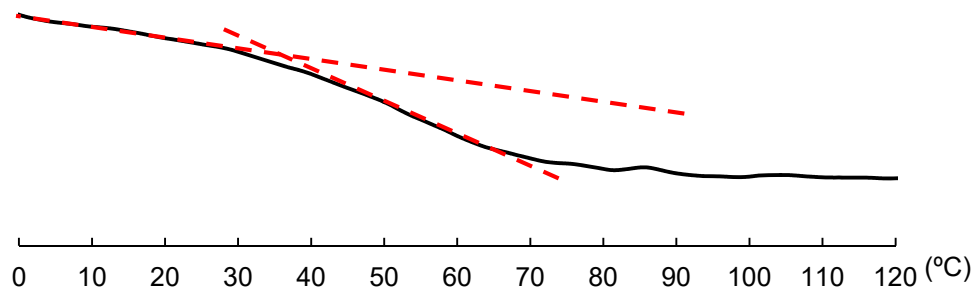


Figure S13. DSC profile of copolymer of Poly(AA) with MMA (Entry 2 in Table 2)

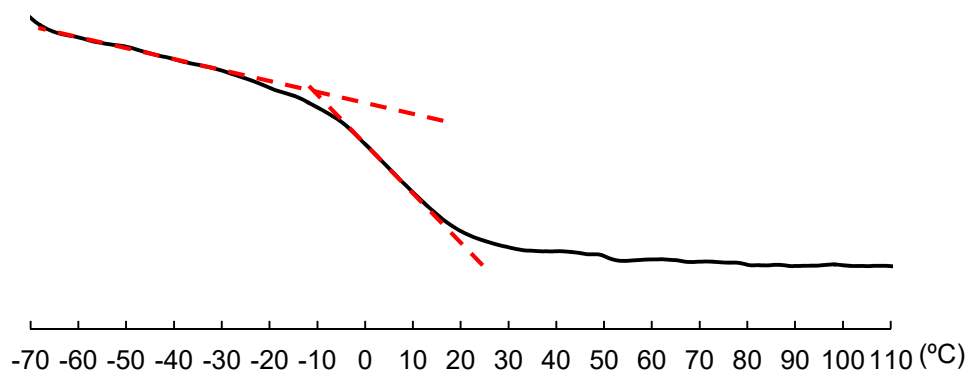


Figure S14. DSC profile of copolymer of Poly(AA) with MMA (Entry 3 in Table 2)

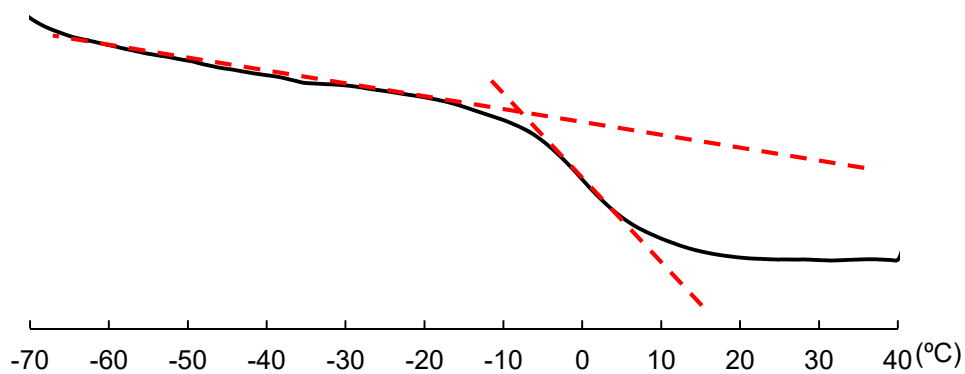


Figure S15. DSC profile of copolymer of Poly(AA) with MA (Entry 4 in Table 2)

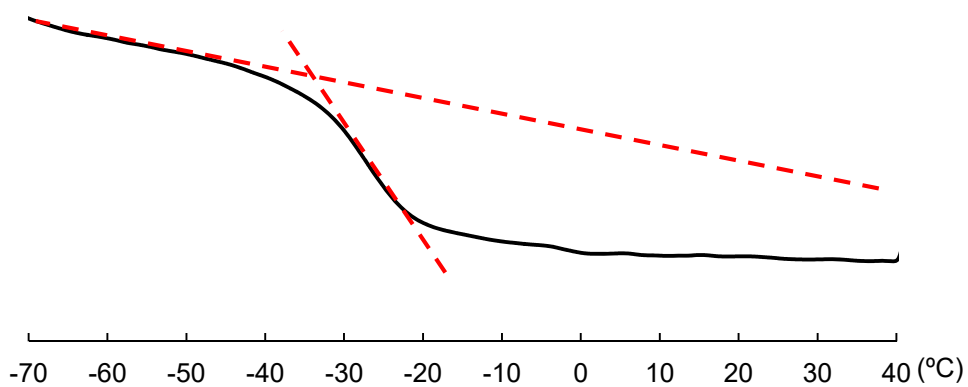


Figure S16. DSC profile of copolymer of Poly(AA) with MA (Entry 6 in Table 2)

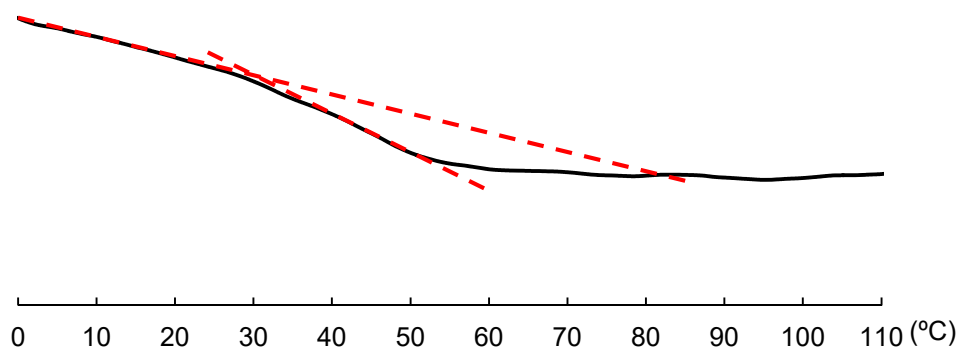


Figure S17. DSC profile of copolymer of Poly(AA) with St (Entry 7 in Table 2)

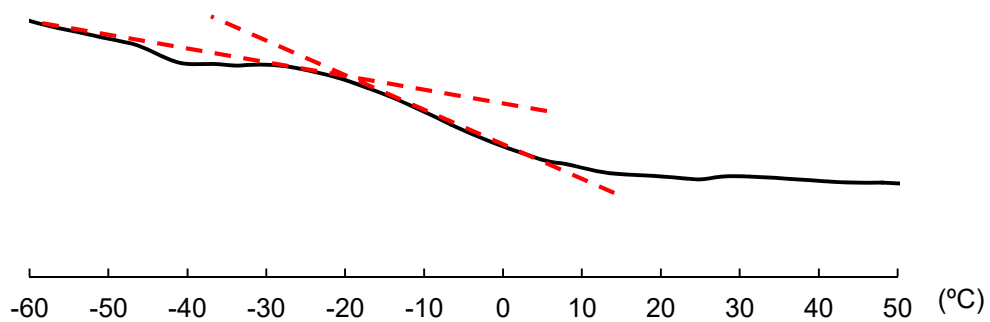


Figure S18. DSC profile of copolymer of Poly(AA) with St (Entry 8 in Table 2)

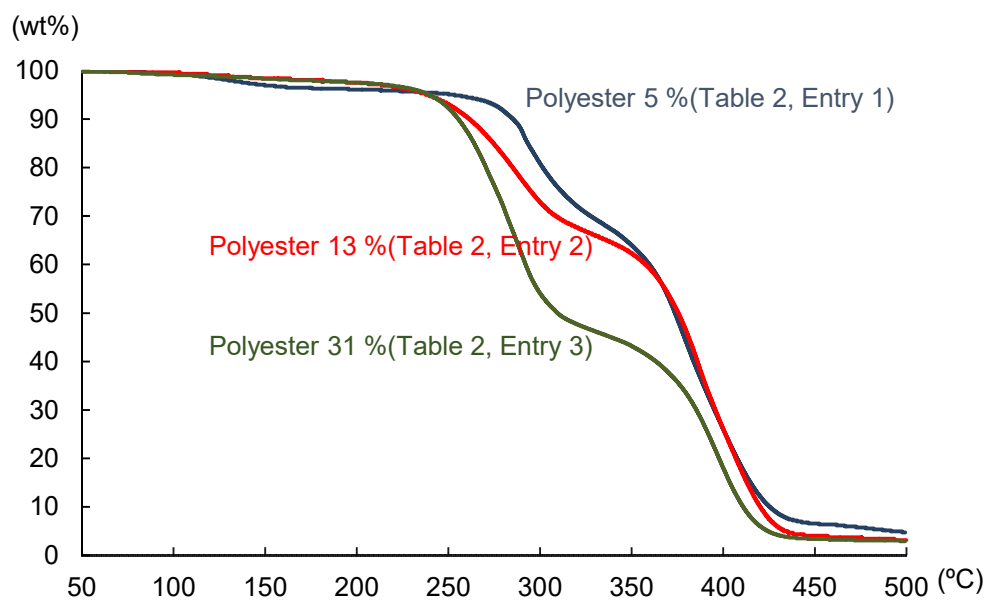


Figure S19. TGA profile of copolymer of Poly(AA) with MMA

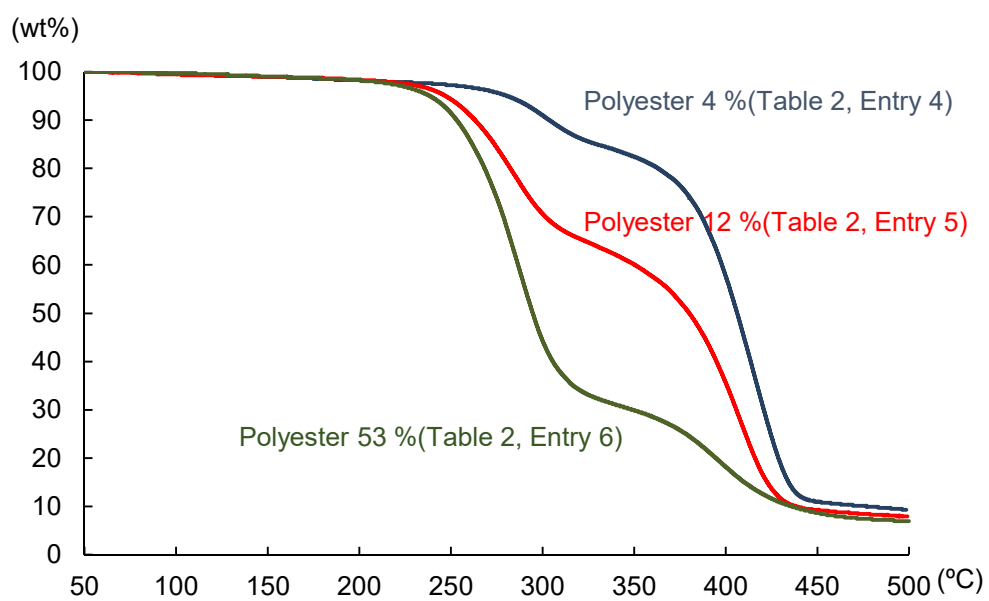


Figure S20. TGA profile of copolymer of Poly(AA) with MA

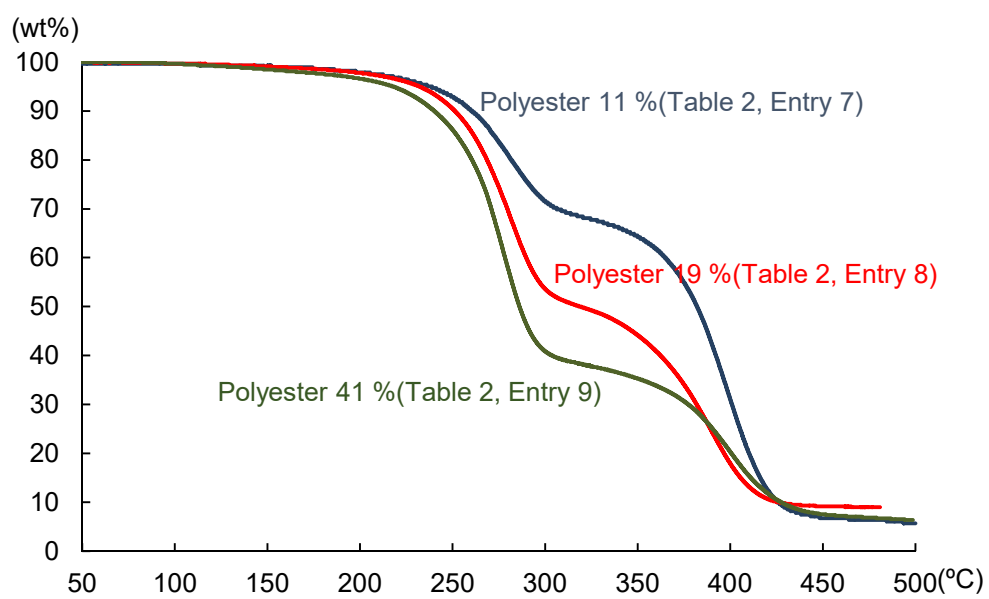


Figure S21. TGA profile of copolymer of Poly(AA) with St

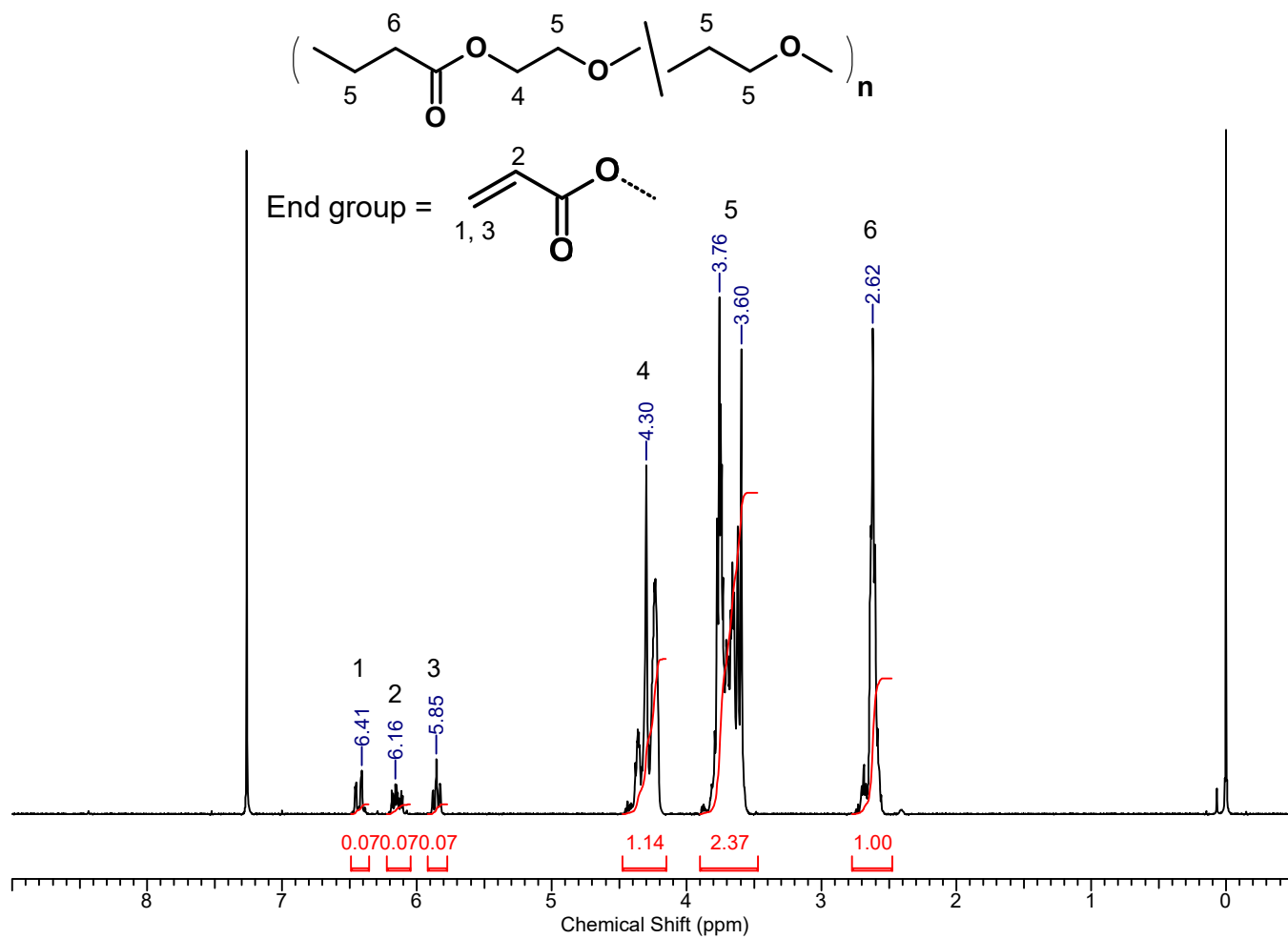


Figure S22. ¹H NMR spectrum of the poly(ester-ether) (Entry 2 in Table 3)

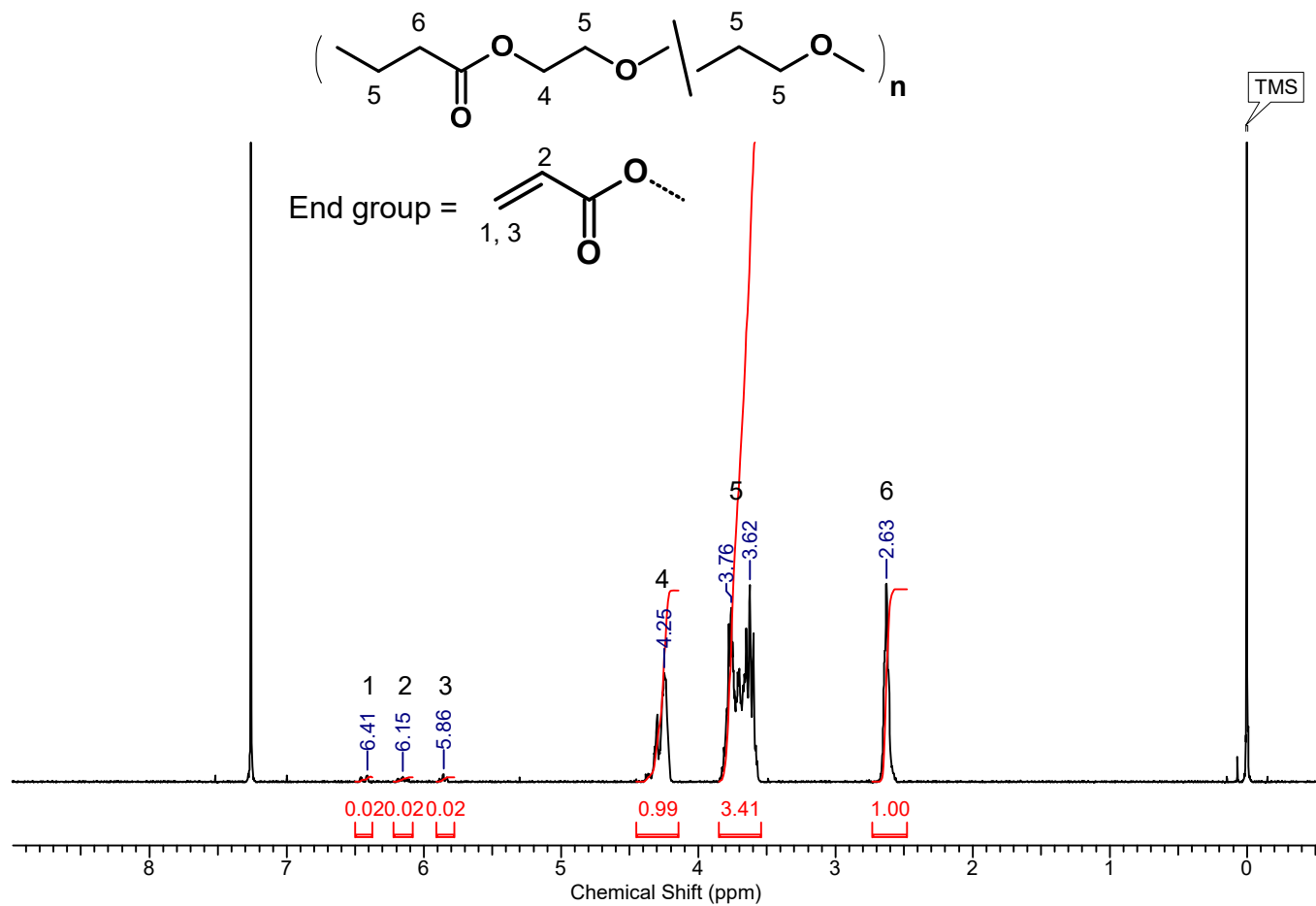


Figure S23. ^1H NMR spectrum of the poly(ester-ether) (Entry 5 in Table 3)

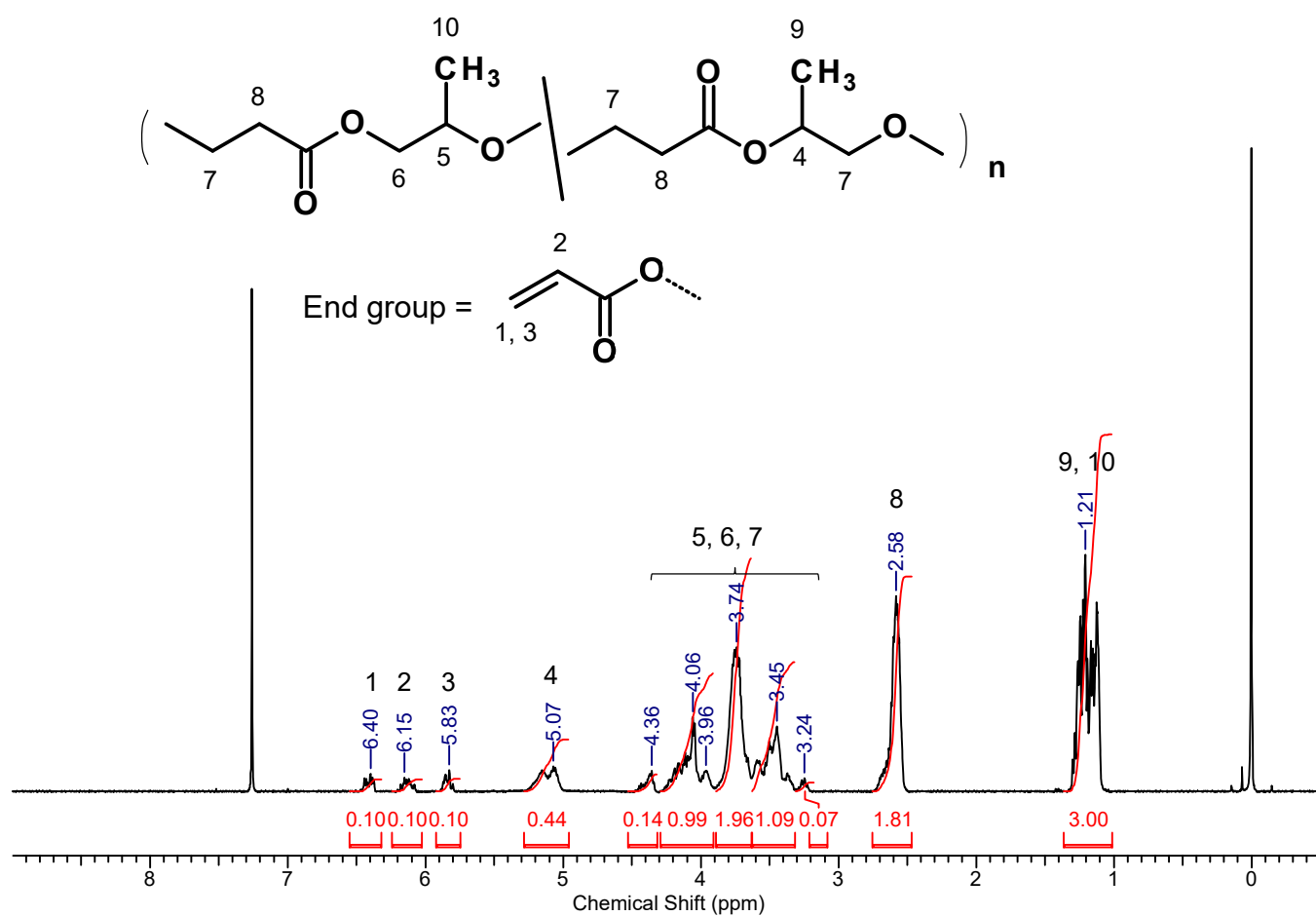


Figure S24. ¹H NMR spectrum of the poly(ester-ether) (Entry 7 in Table 3)

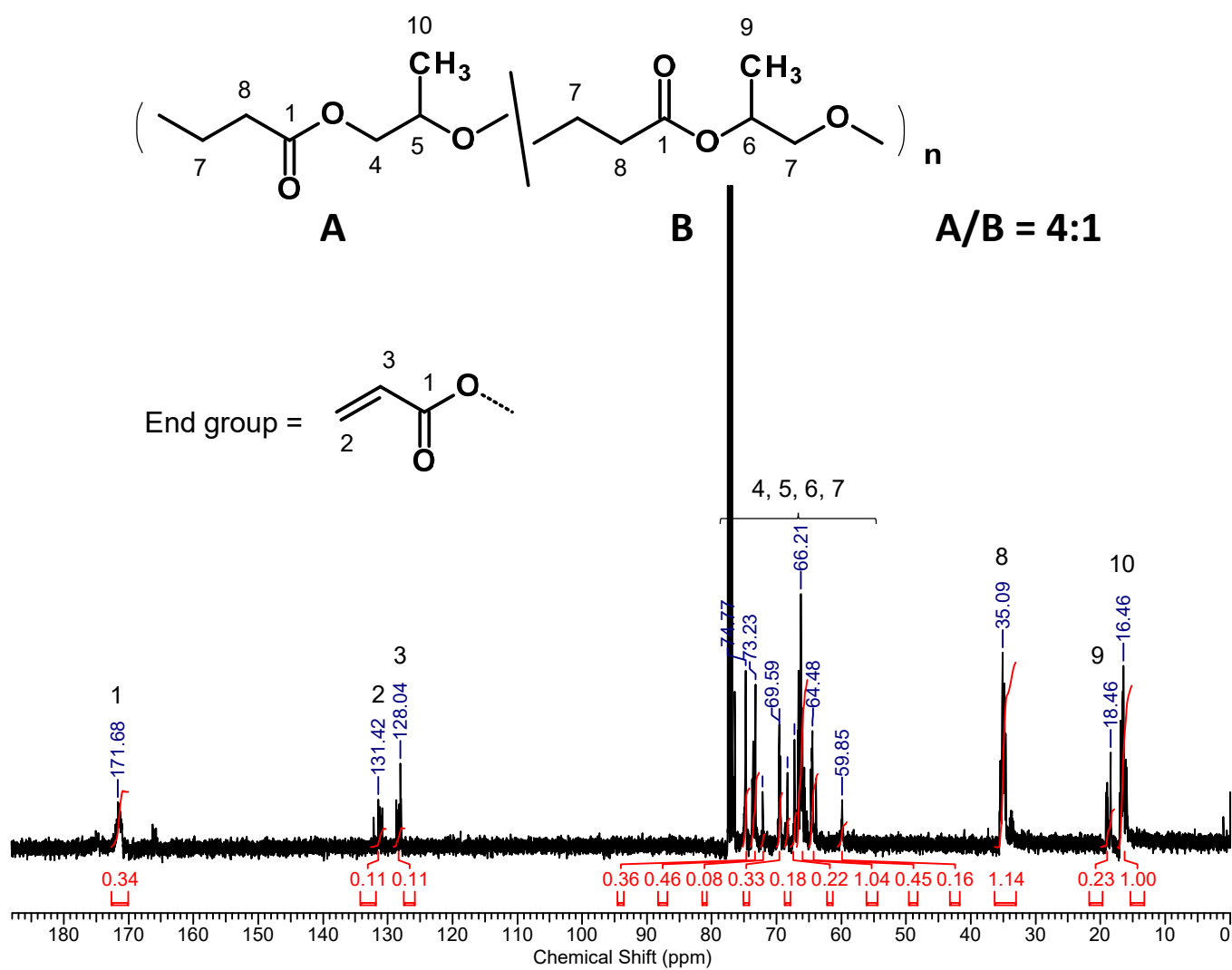


Figure S25. ^{13}C NMR spectrum of the poly(ester-ether) (Entry 7 in Table 3)

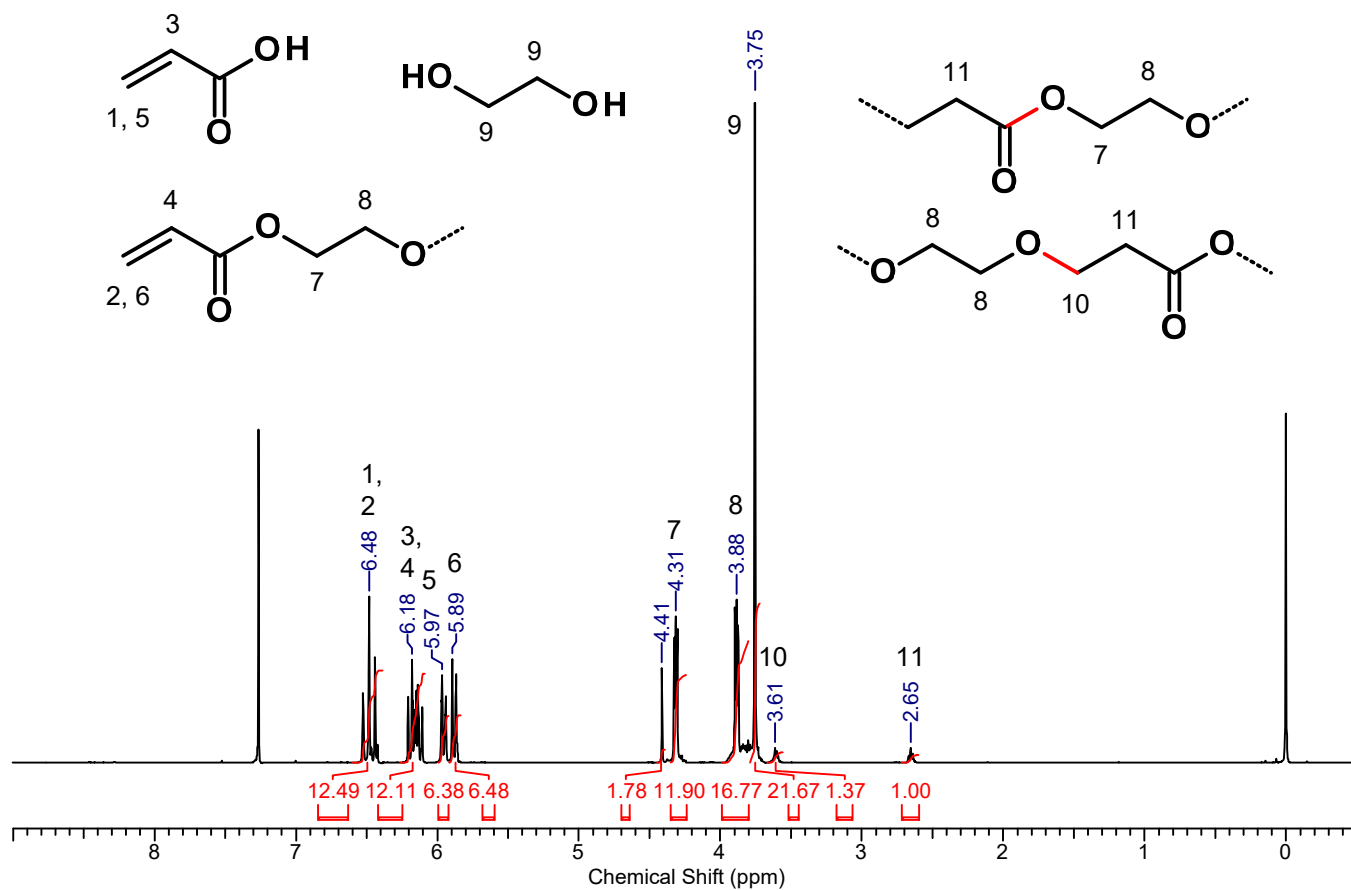


Figure S26. ^1H NMR spectrum of the crude mixture obtained by the reaction of AA with EG for 10 min (Scheme 3)

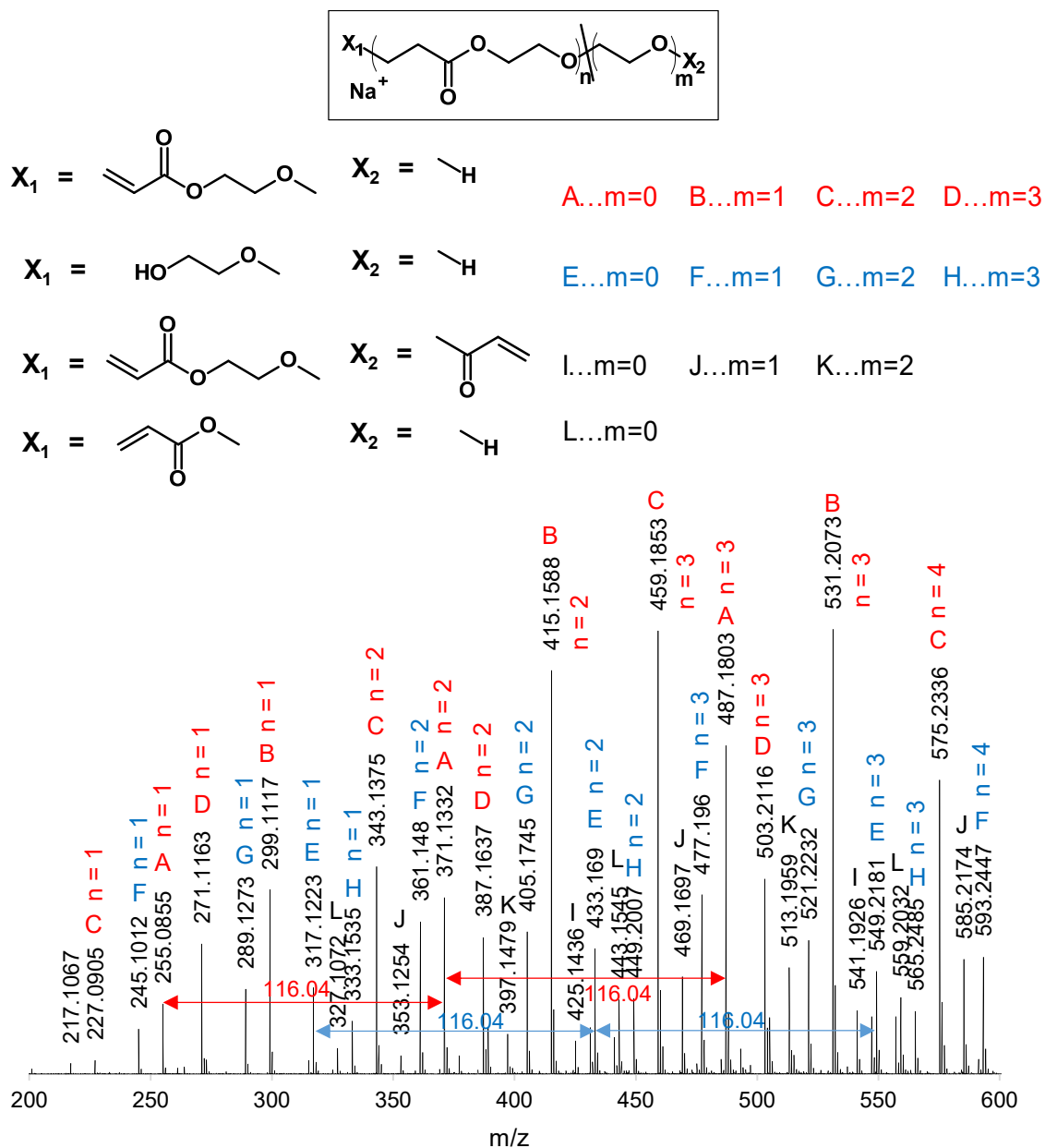


Figure S27. ESI-MS spectrum of poly(ester-ether) (Entry 2 in Table 3)