Electronic Supplementary Information for

A Throughway to Functional Poly(disubstituted acetylenes): Combination of Activated Ester Strategy with Click Reaction

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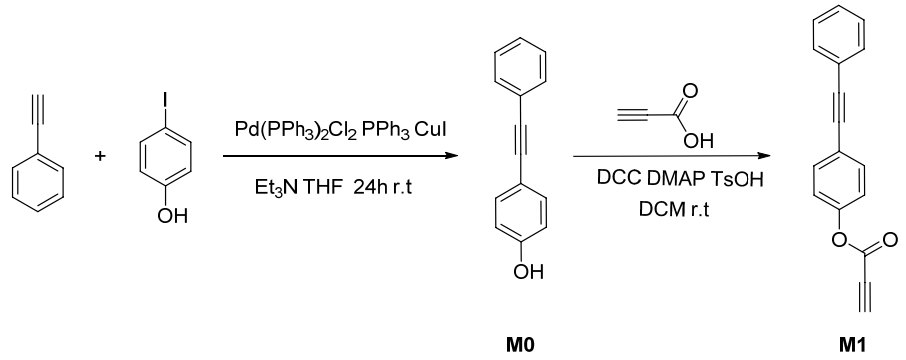

Scheme S1 Synthetic route to disubstituted acetylene monomer containing terminal alkyne functionality (M**1**).

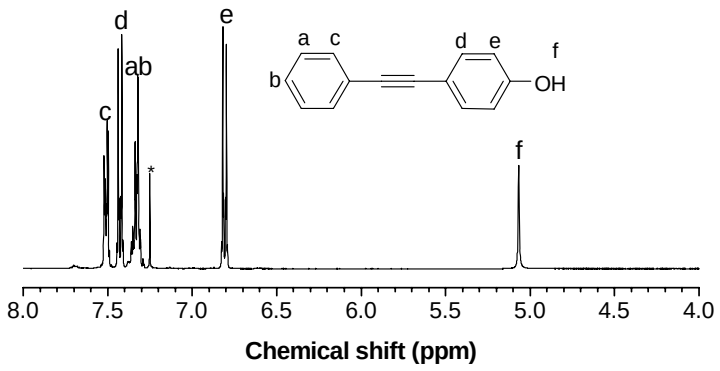

Fig. S1. ^{1}H NMR spectrum of M**0** in $CDCl_3$. The solvent peak is marked with an asterisk.

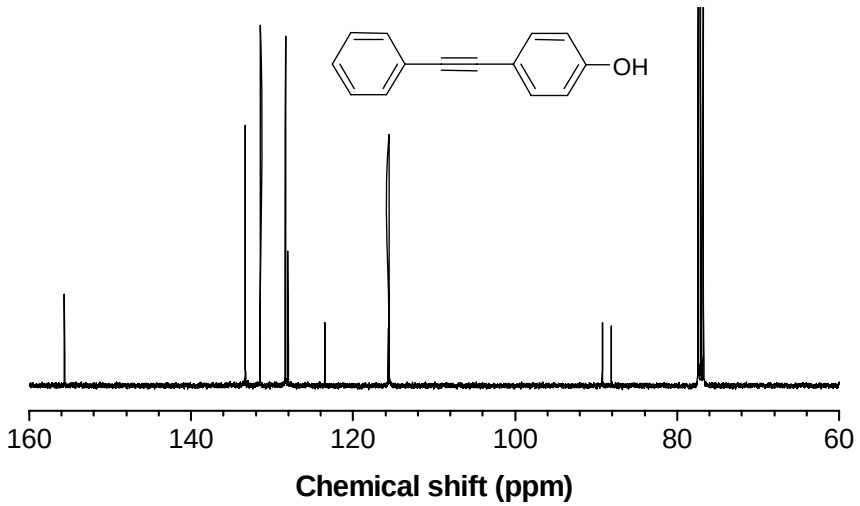

Fig. S2. ^{13}C NMR spectrum of M**0** in $CDCl_3$.

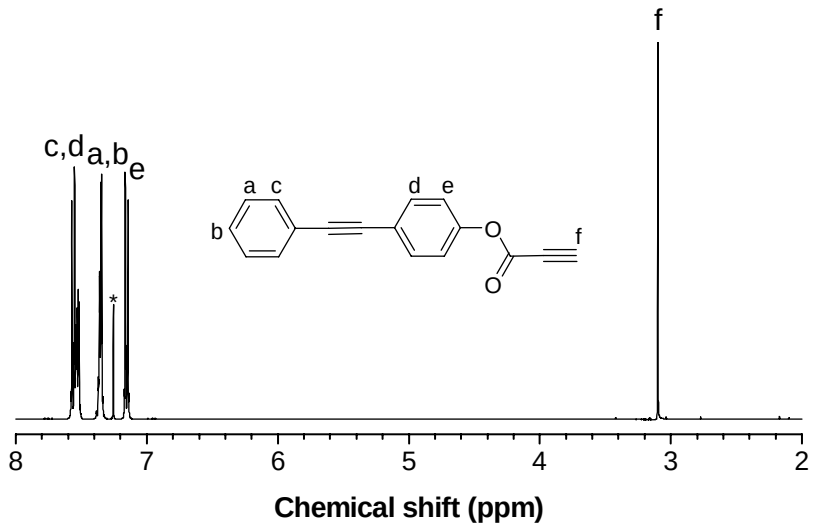

Fig. S3. ^{1}H NMR spectrum of M**1** in $CDCl_3$. The solvent peak is marked with an asterisk.

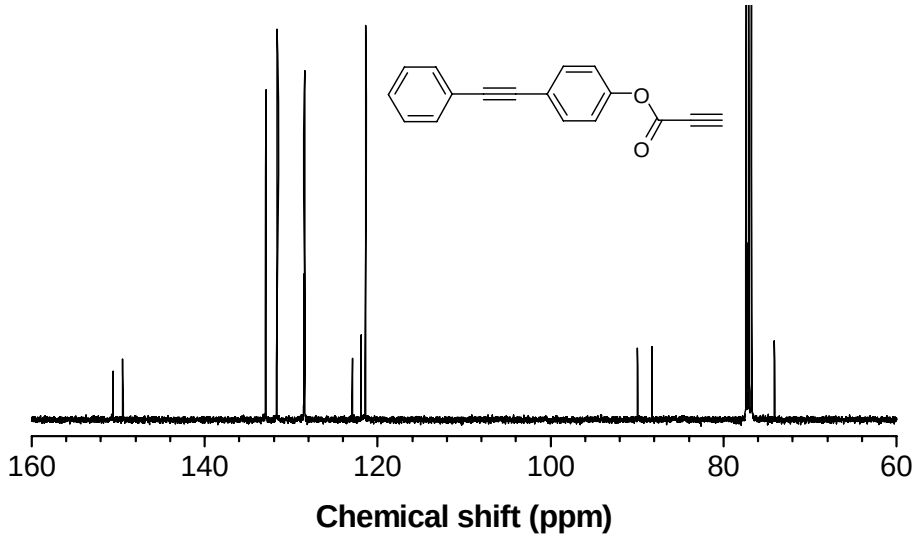

Fig. S4. ^{13}C NMR spectrum of M**1** in $CDCl_3$.

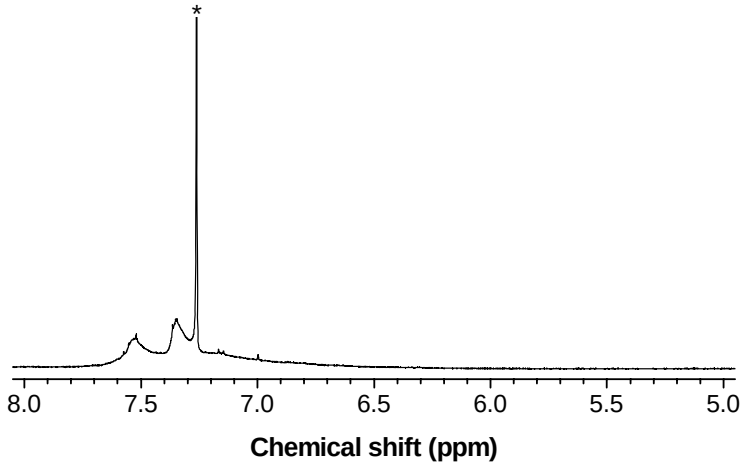

Fig. S5. ^{1}H NMR spectrum of PMSA in $CDCl_3$. The solvent peak is marked with an asterisk. The peaks appearing at low field origin from absorbed solvents.

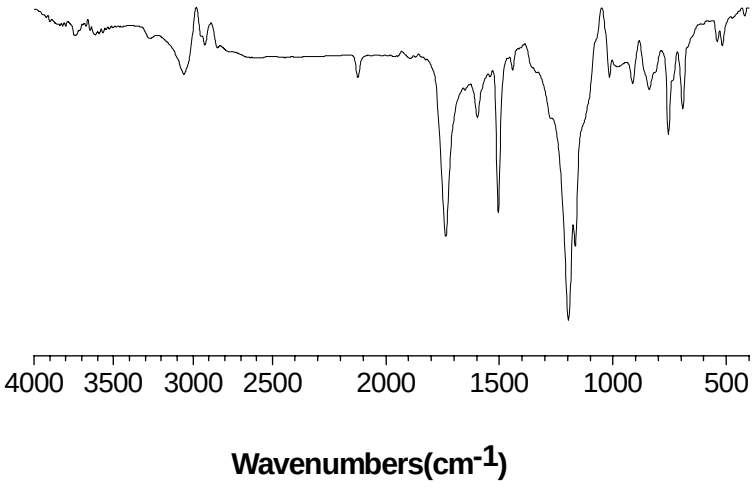

Fig. S6. FTIR spectrum of PMSA derived from the polymerization of M**1** using WCl_6-Ph_4Sn as catalyst.

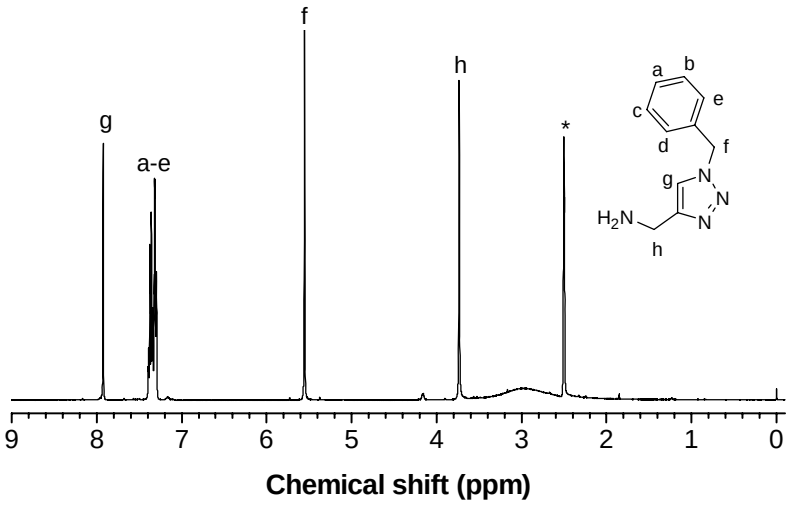

Fig. S7. ^{1}H NMR spectrum of **M2** in DMSO-*d*6. The solvent peak is marked with an asterisk.

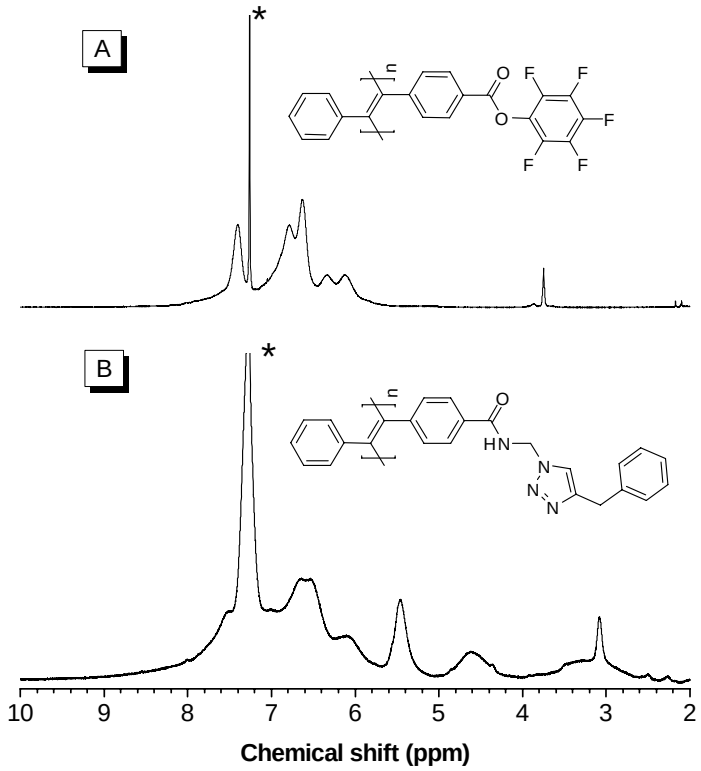

Fig. S8. ^{1}H NMR spectra of P**0** (A) and P**3-2** (B) in $CDCl_3$. The solvent peak is marked with an asterisk.