Supplementary information

Influence of different sequences of L-proline dipeptide derivatives in the pendants on the helix of poly(phenylacetylene)s and their enantioseparation properties

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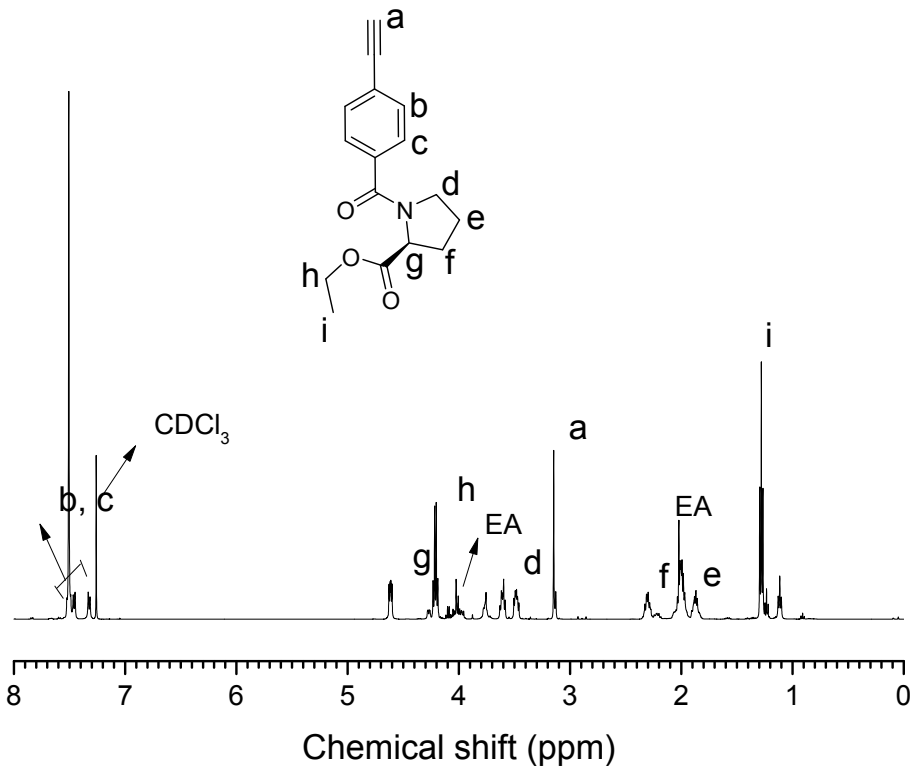

Figure S1. ^{1}H NMR spectrum of the intermediate product (i) in $CDCl_3$ at 20 °C.

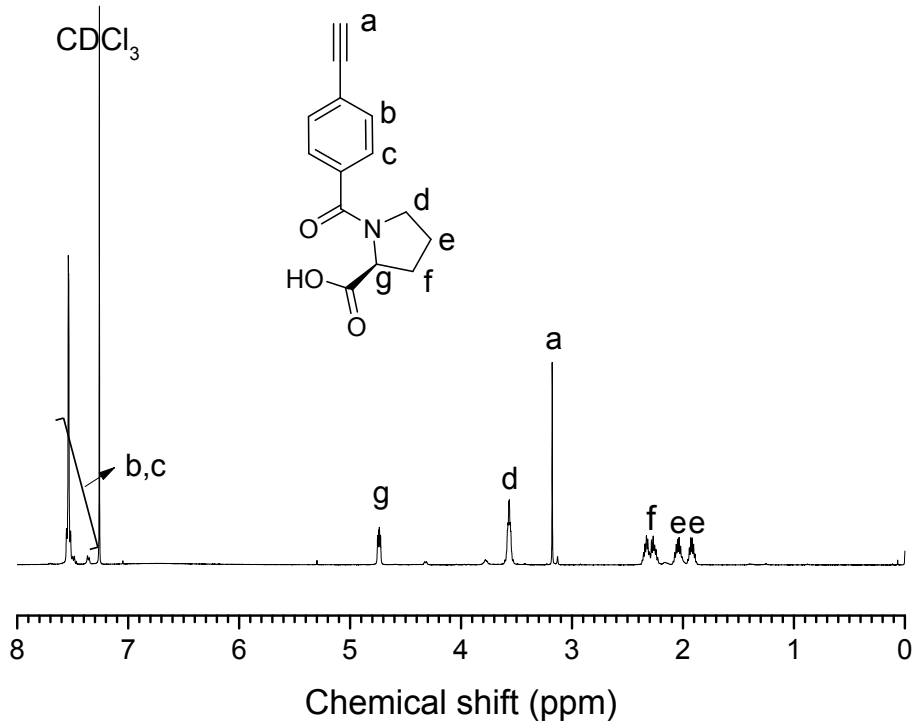

Figure S2. ^{1}H NMR spectrum of the intermediate product (ii) in $CDCl_3$ at 20 °C.

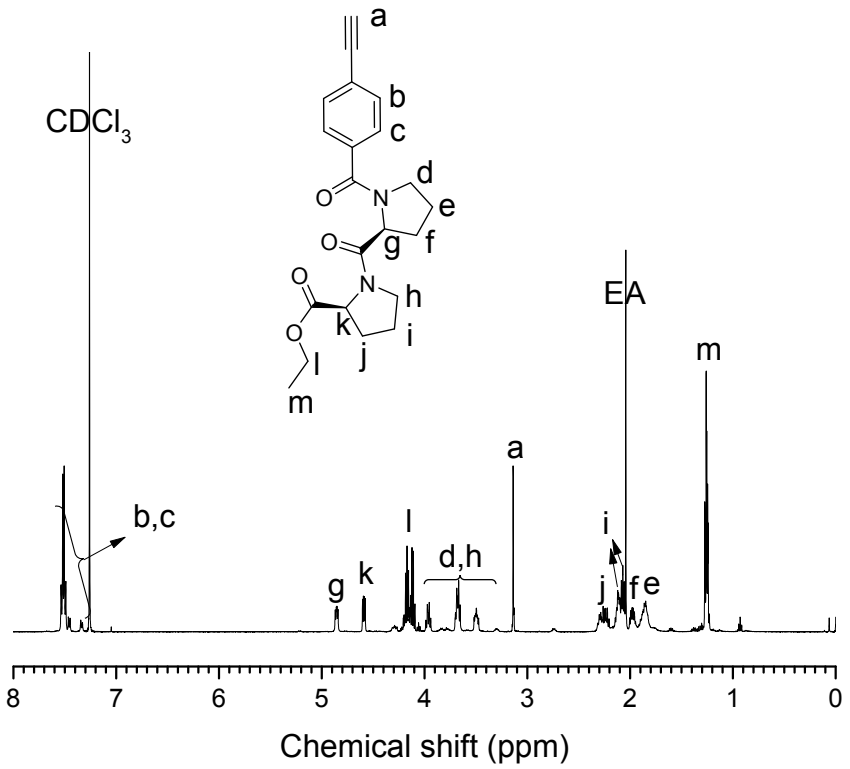

Figure S3. ^{1}H NMR spectrum of **PA-1** in $CDCl_3$ at 20 °C.

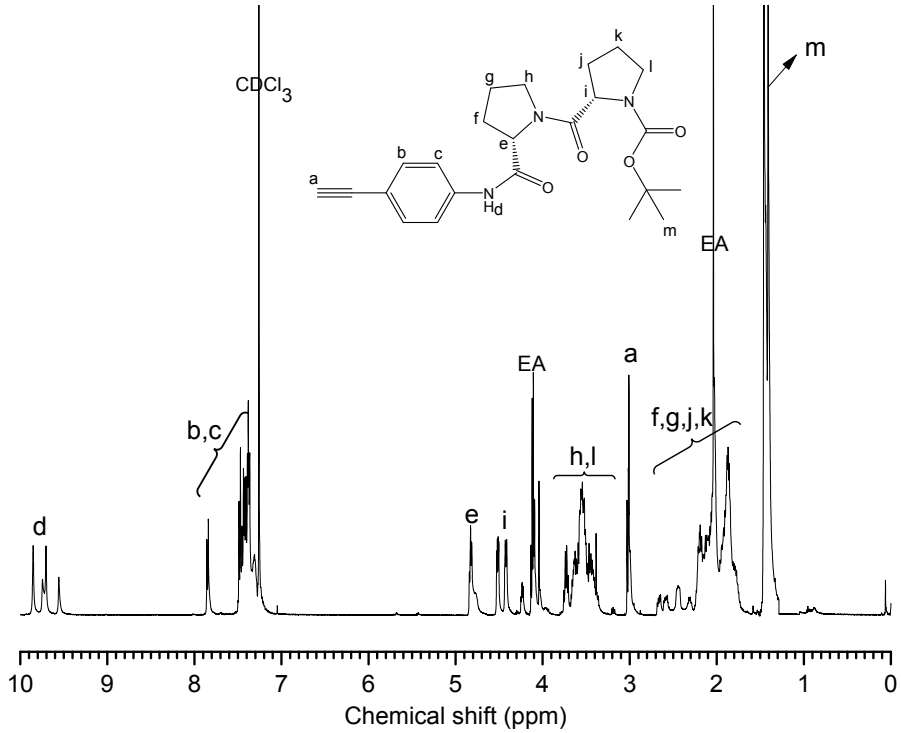

Figure S4. ^{1}H NMR spectrum of **PA-2** in $CDCl_3$ at 20 °C.

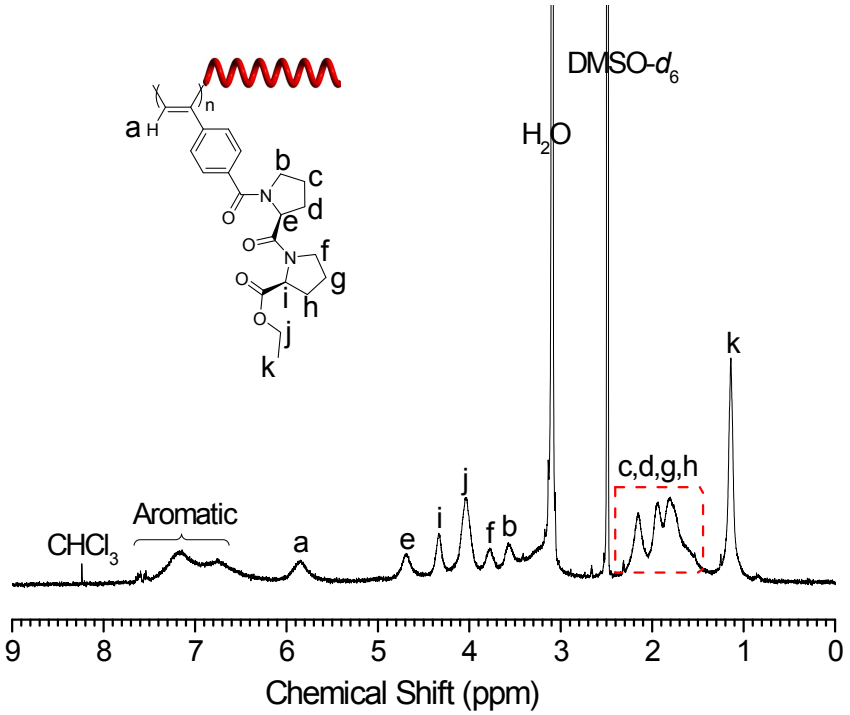

Figure S5. ^{1}H NMR spectrum of **PPA-1** in DMSO-d_6 at 80 °C.

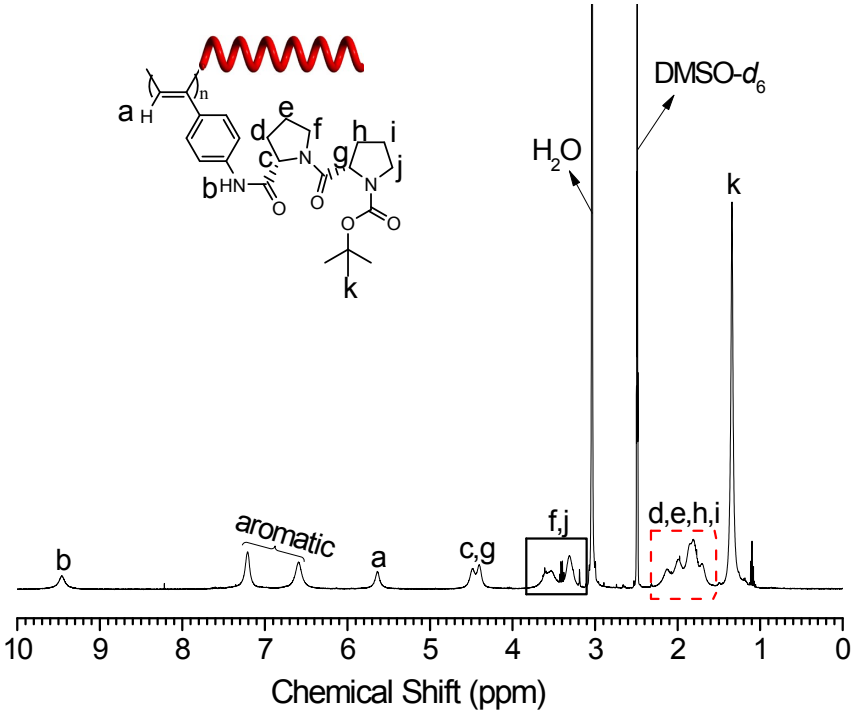

Figure S6. ^{1}H NMR spectrum of **PPA-2** in DMSO-d_6 at 80 °C.

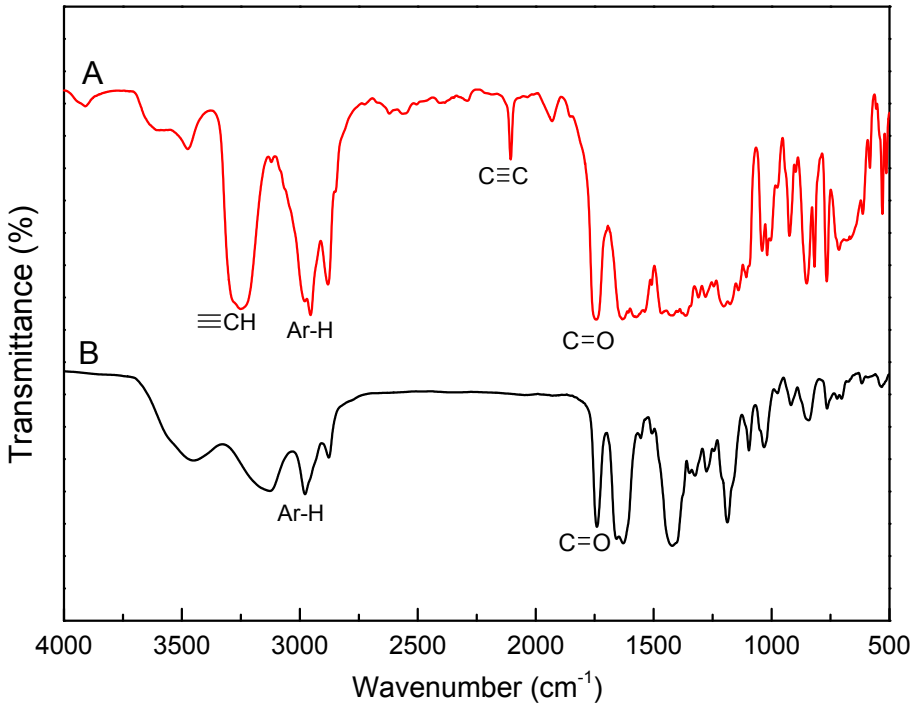

Figure S7. IR spectra of (A) monomer **PA-1** and (B) its polymer **PPA-1**.

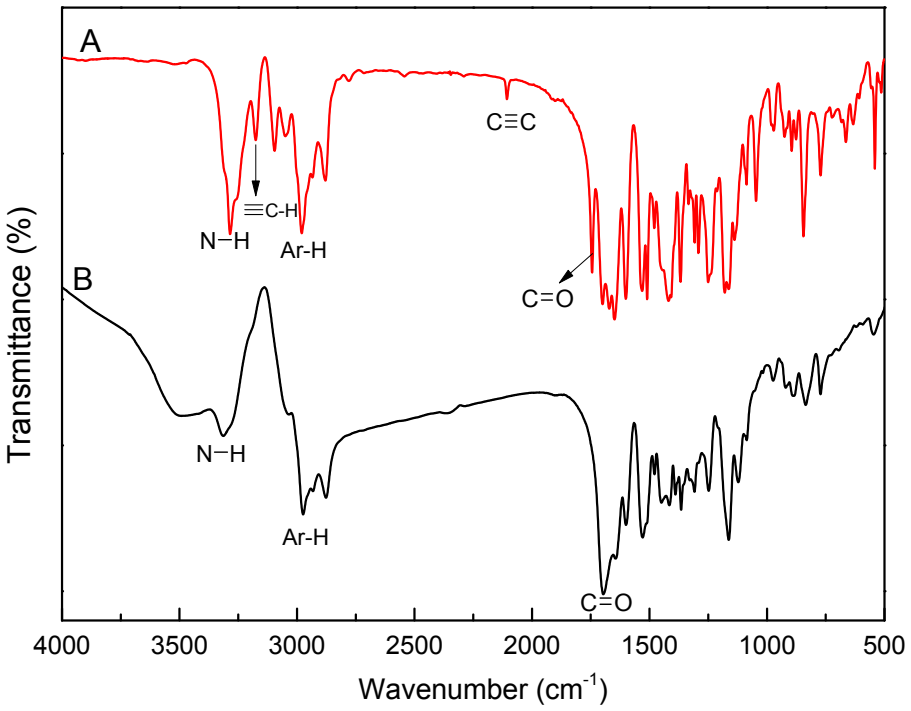

Figure S8. IR spectra of (A) monomer **PA-2** and (B) its polymer **PPA-2**.

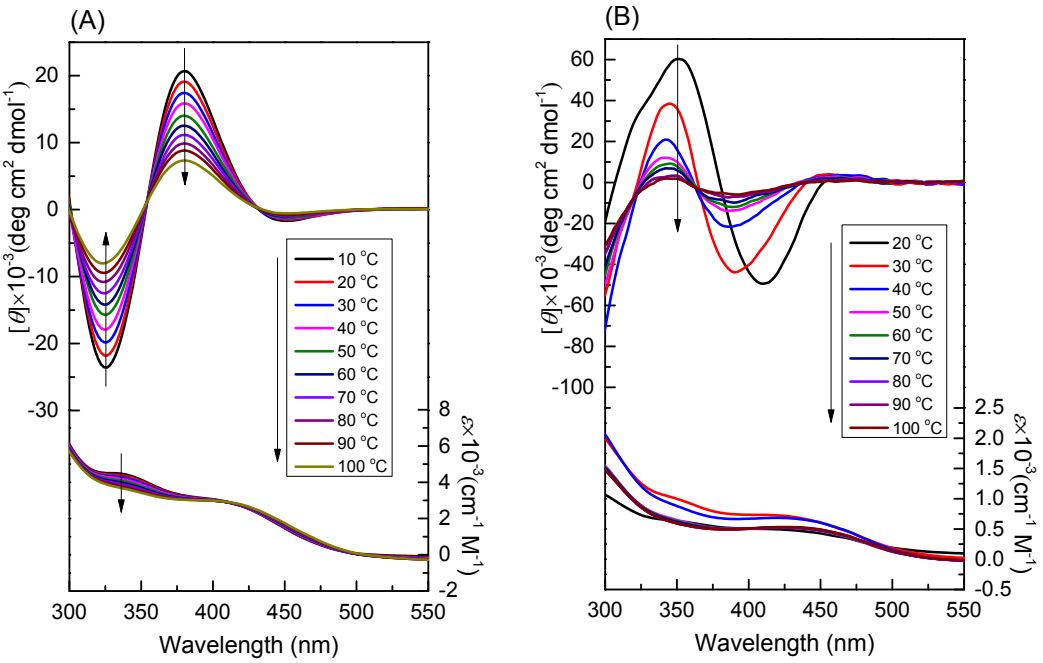

Figure S9. Temperature dependence of the CD and UV-Vis spectra of (A) **PPA-1** in DMF (B) **PPA-2** in DMSO (c = 1 mg/mL).

Dynamic Light Scattering Measurements (DLS). Dynamic Light Scattering Measurements (DLS). DLS measurements were performed on a Nicomp 380ZLS (PSS. NICOPMP, USA) equipped with a 15 mW Laser at 25 °C. The obtained diameters of **PPA-1** in $CHCl_3$ (29 nm) was almost comparable to that in the other solvents (26-32 nm). And for **PPA-2**, the obtained diameters of **PPA-2** in the solvents were in the range of 30-33 nm. These results indicate that the polymers could be well soluble in the solvents and the formation of aggregates of the polymer main chains in the presence of a polar solvent such as DMF can be excluded.