Supporting information

for

Phase Separation in Electrospun Nanofiber Depending on Crystallization Induced Self-assembly

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^{1}H-NMR spectra

PPDO precursor: ^{1}H-NMR ($CDCl_3$, 400 MHz)

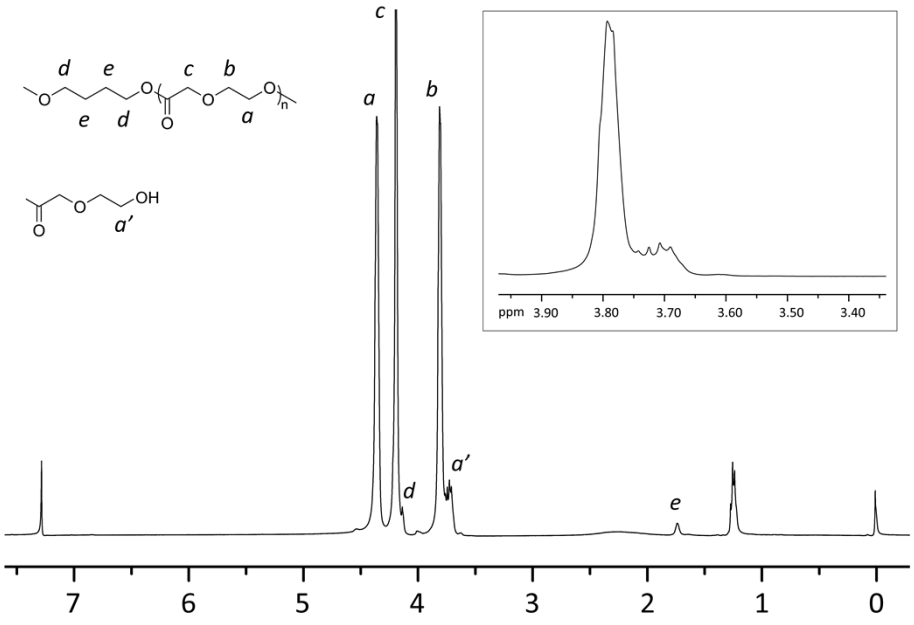

Fig. S1 ^{1}H-NMR spectrum of PPDO precursor

PPDO-b-PEG multi-block copolymer: ^{1}H-NMR ($CDCl_3$, 400 MHz)

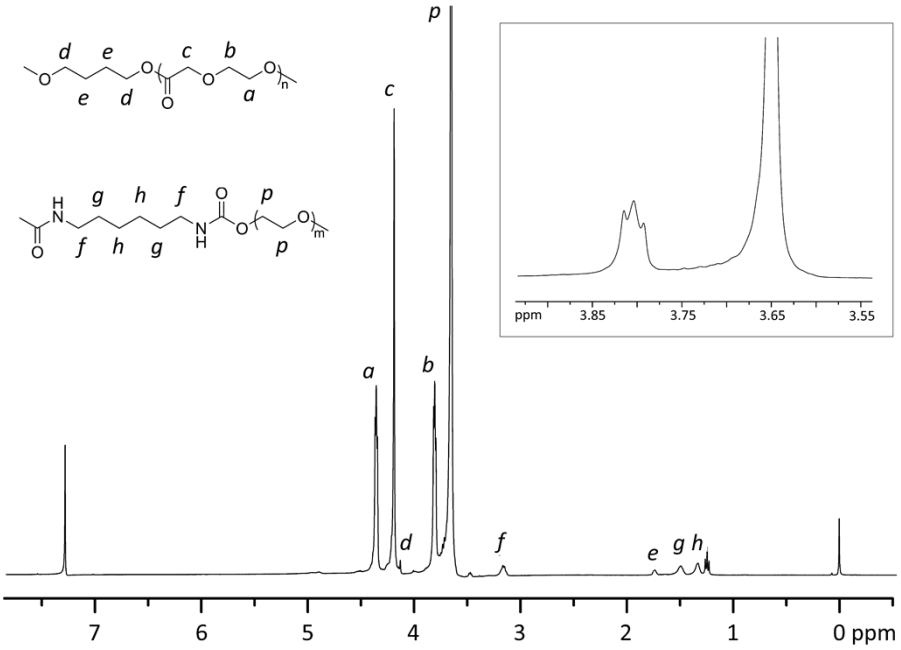

Fig. S2 ^{1}H-NMR spectrum of PPDO-b-PEG copolymer

FITR spectrum of PPDO-b-PEG copolymer

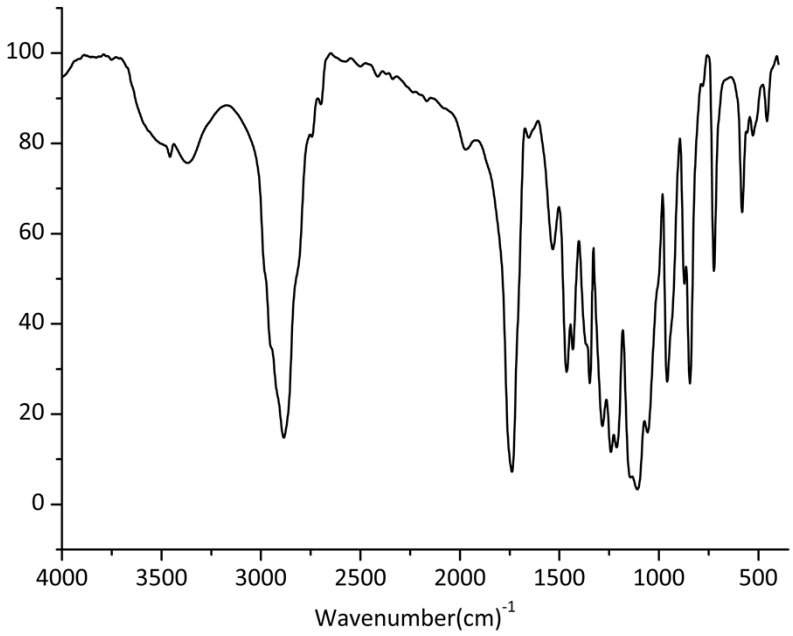

Fig. S3 The FTIR spectra of the PPDO-b-PEG multi-block copolymer

Selective etching of electrospun mat

The following equation was used to calculate the mass loss of the electrospun mat after

selective etching.

$$\text{Mass loss (\%)} = \frac{w_a - w_b}{w_a} \times 100\% \quad \text{(S1)}$$

where w_a and w_b are the weight of the electrospinning mat before and after selective etching, respectively. The mass losses of the PLA/PPDO-b-PEG samples, calculated by weighting the samples before and after selectively removing PPDO-b-PEG, are 23.8 wt%, 23.4wt%, 25.5 wt%, 22.2wt%, respectively, and very close to the weight content of PPDO-b-PEG in spinning solution.

Table S1 mass loss of PLA/PPDO-b-PEG nanofiber after selective etching of PPDO-b-PEG

DMF content (%)	w_a g	w_b g	mass loss (%)
0	0.0336	0.0256	23.8
10	0.0368	0.0282	23.4
20	0.0276	0.0206	25.5
30	0.0406	0.0316	22.2