

Supporting information

Electroactive nanofibrous biomimetic scaffolds by thermal induced phase separation

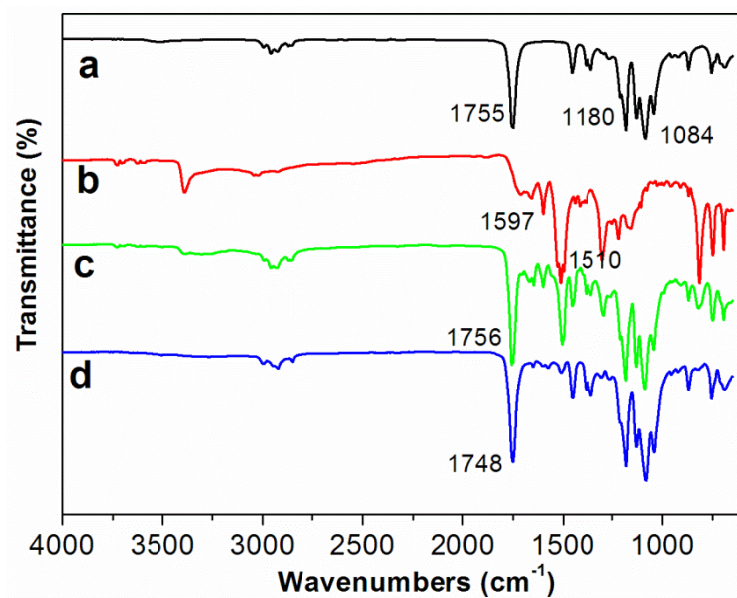


Fig. S1. FT-IR spectra of (a) P1.5k, (b) T, (c) TPT and (d) P80k/TPT9 blend.

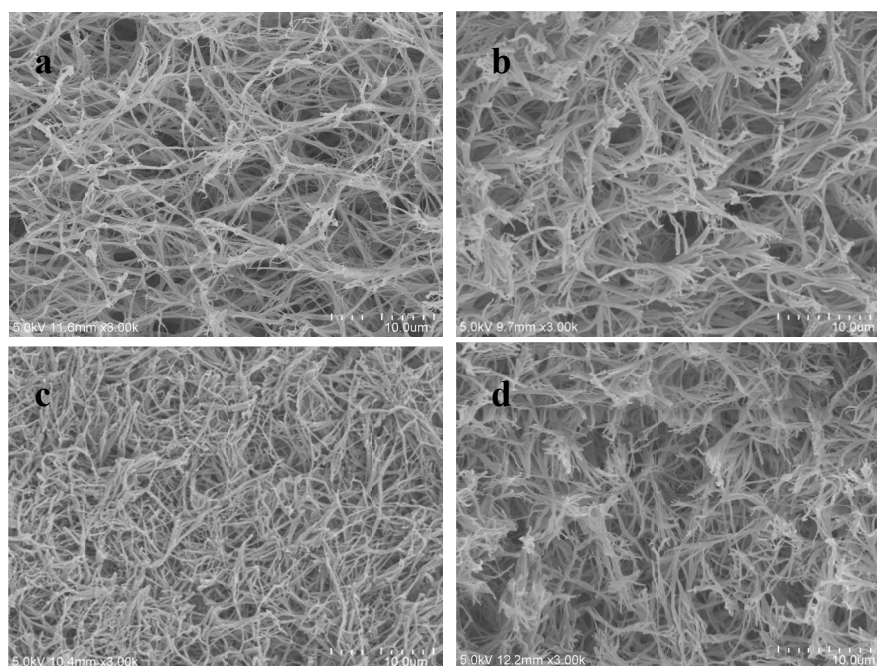


Fig. S2. SEM images of (a) 5 wt% of the P80k/TPT9, phase separation temperature at

-20 °C, (b) 5 wt% P80k/TPT9, phase separation temperature at -80 °C, (c) 7.5 wt% P80k/TPT9, phase separation temperature at -20 °C and (d) 7.5 wt% P80k/TPT9, phase separation temperature at -80 °C.

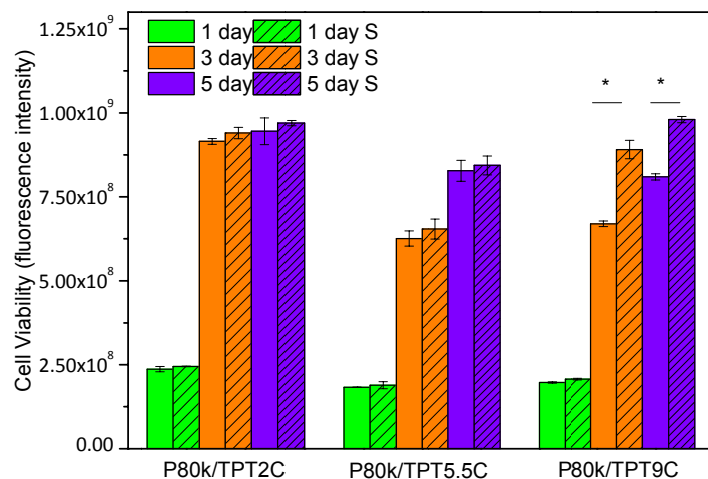


Fig. S3. Cell viability of C2C12 cells on P80k/TPT2C, P80k/TPT5.5C, P80k/TPT9C substrates stimulated by the electrical signals for 1, 3, 5 days (* $p < 0.05$, S: stimulated by electrical signal). There was no significantly difference between the electrical stimulation groups and the unstimulated group on P80k/TPT2C, and P80k/TPT5.5C ($p > 0.05$). However, the cell viability of C2C12 myoblasts on P80k/TPT9C significantly increased by electrical stimulation ($p < 0.05$).

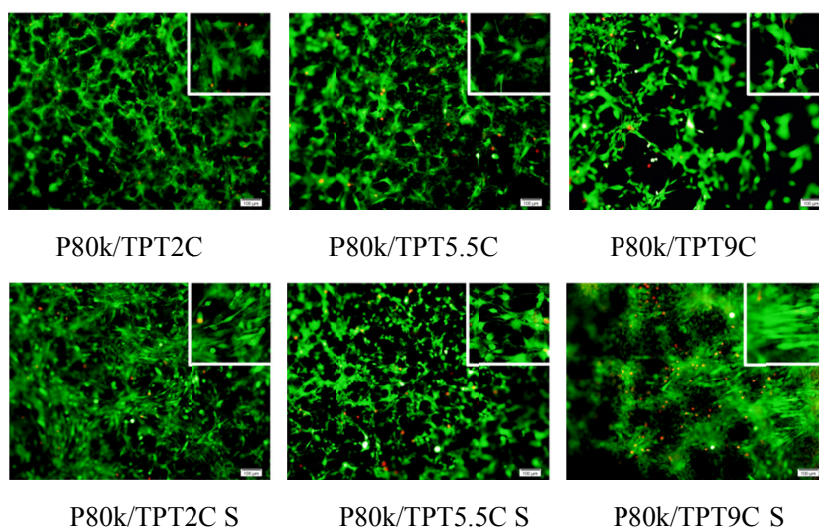


Fig. S4. Fluorescent images of C2C12 cells on P80k/TPT2C, P80k/TPT5.5C,

P80k/TPT9C substrates stained by LIVE/DEAD[®] Viability/Cytotoxicity Kit. Scale bars represent 100 μm . The C2C12 myoblasts on P80k/TPT9C tended to gather together and showed a more elongated morphology in the electrical stimulation group compared to the unstimulated group.