

Supporting Information

Incorporation of Chromophores into Dendrigraft Polybutadiene: Effect of Dendrigraft Matrix on the Fluorescent Properties

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Table S1. Modification Efficiency of Dendrigraft PB Matrix

| polymer | E-PB | PB-OH | PB-Br | PB-N ₃ |
|---------|-------------------|-------------------|-------------------|-------------------|
| | E.F. ^a | E.F. ^b | E.F. ^c | E.F. ^d |
| | (%) | (%) | (%) | (%) |
| LC-PB | 15 | 100 | 93 | 100 |
| SC-PB | 14 | 100 | 95 | 100 |

^a E.F. was the efficiency of epoxidation degree, determined by ¹H NMR. ^b E.F. was the efficiency of hydroxyl degree, determined by ¹H NMR. ^c E.F. was the efficiency of brominated degree, determined by Mohr precipitation titration method. ^d E.F. was the efficiency of azide degree, determined by ¹H NMR, E.F.^c = A(1.47)/3A(3.5–4.1), A(1.47) and A(3.5–4.1) represents the area of integral areas at 1.47 ppm and 3.5–4.1 ppm, respectively.

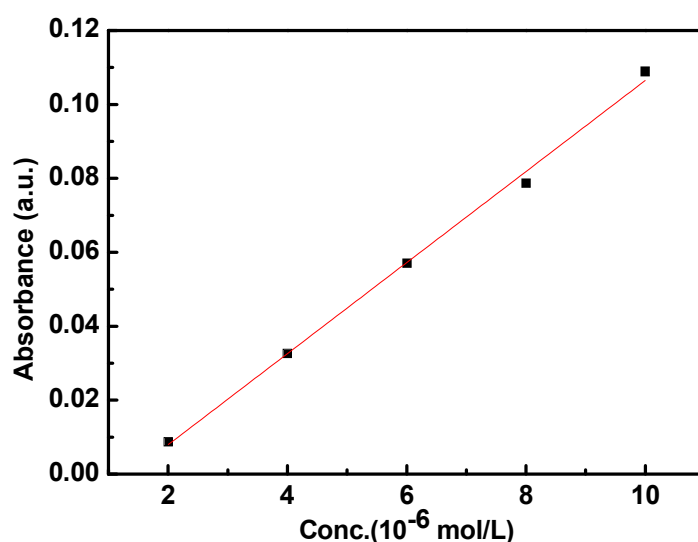


Figure S1. UV-vis standard curve of Cou-Alk in THF.

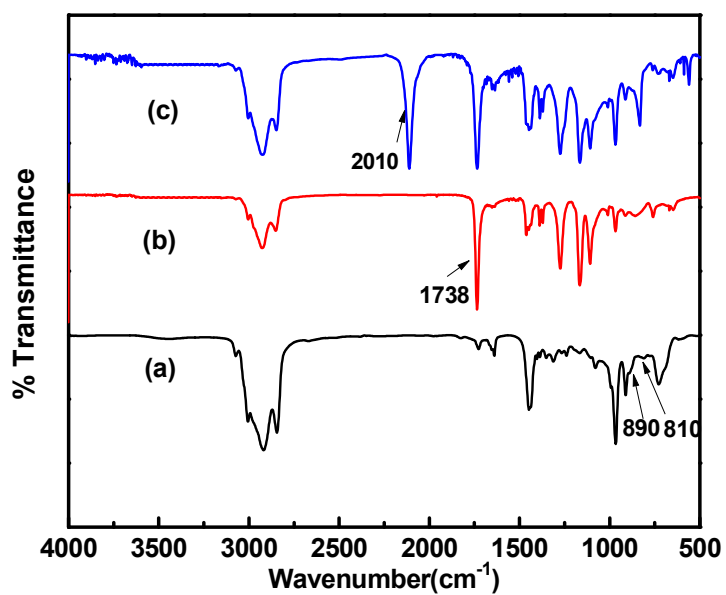


Figure S2. FT-IR spectra of (a) EPB, (b) PB-Br, (c) PB-N₃.

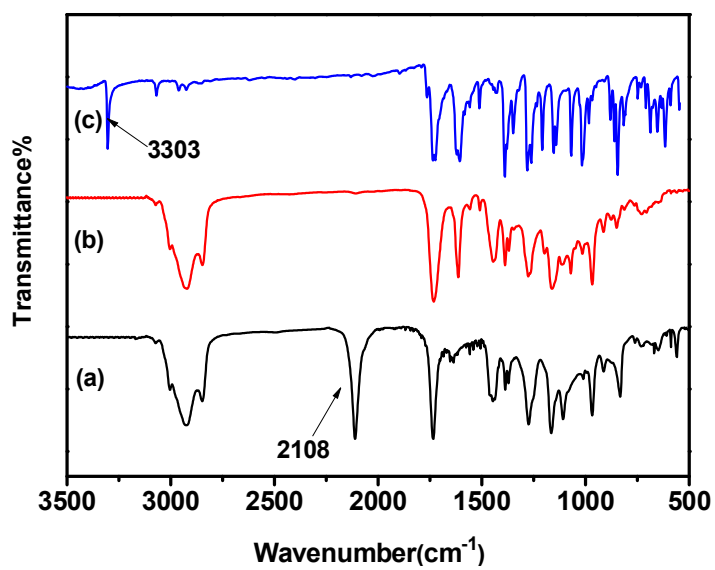


Figure S3. FT-IR spectra of (a) PB-N₃, (b) PB-Cou, (c) Cou-Alk.

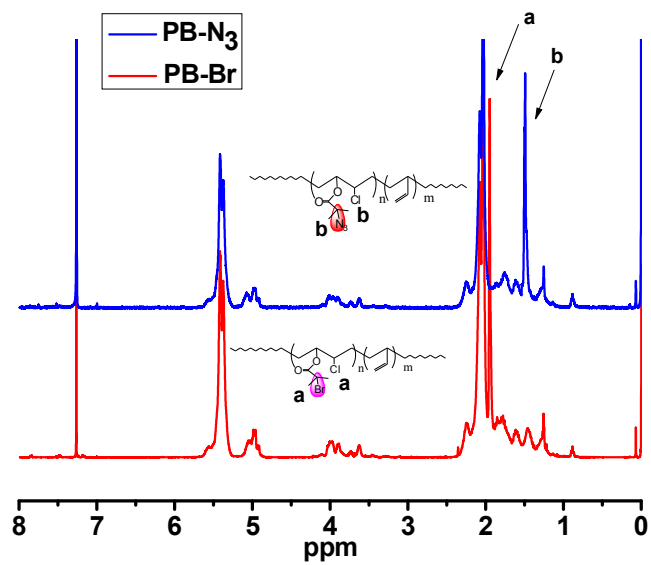


Figure S4. ¹H NMR spectra of PB-N₃ and PB-Br.