Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supplementary Information

Block copolymer with crosslinkable polythiophene and removable poly(ethylene oxide) for preparing heterostructures of organic semiconductors

T. Ube, T. Kosaka, H. Okazaki, K. Nakae and T. Ikeda

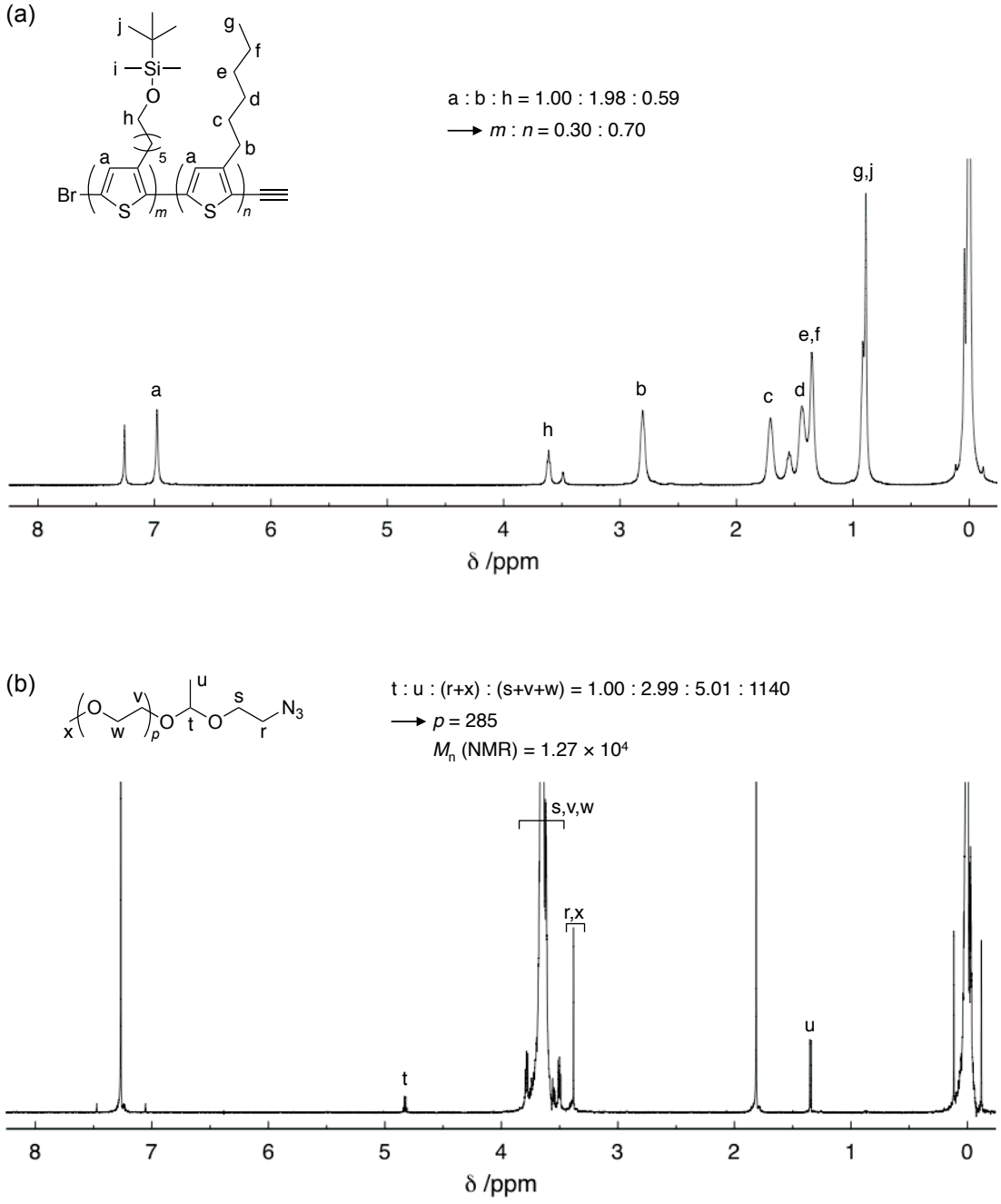

Fig. S1 ^{1}H NMR spectra. (a) ***3***, (b) ***4***.

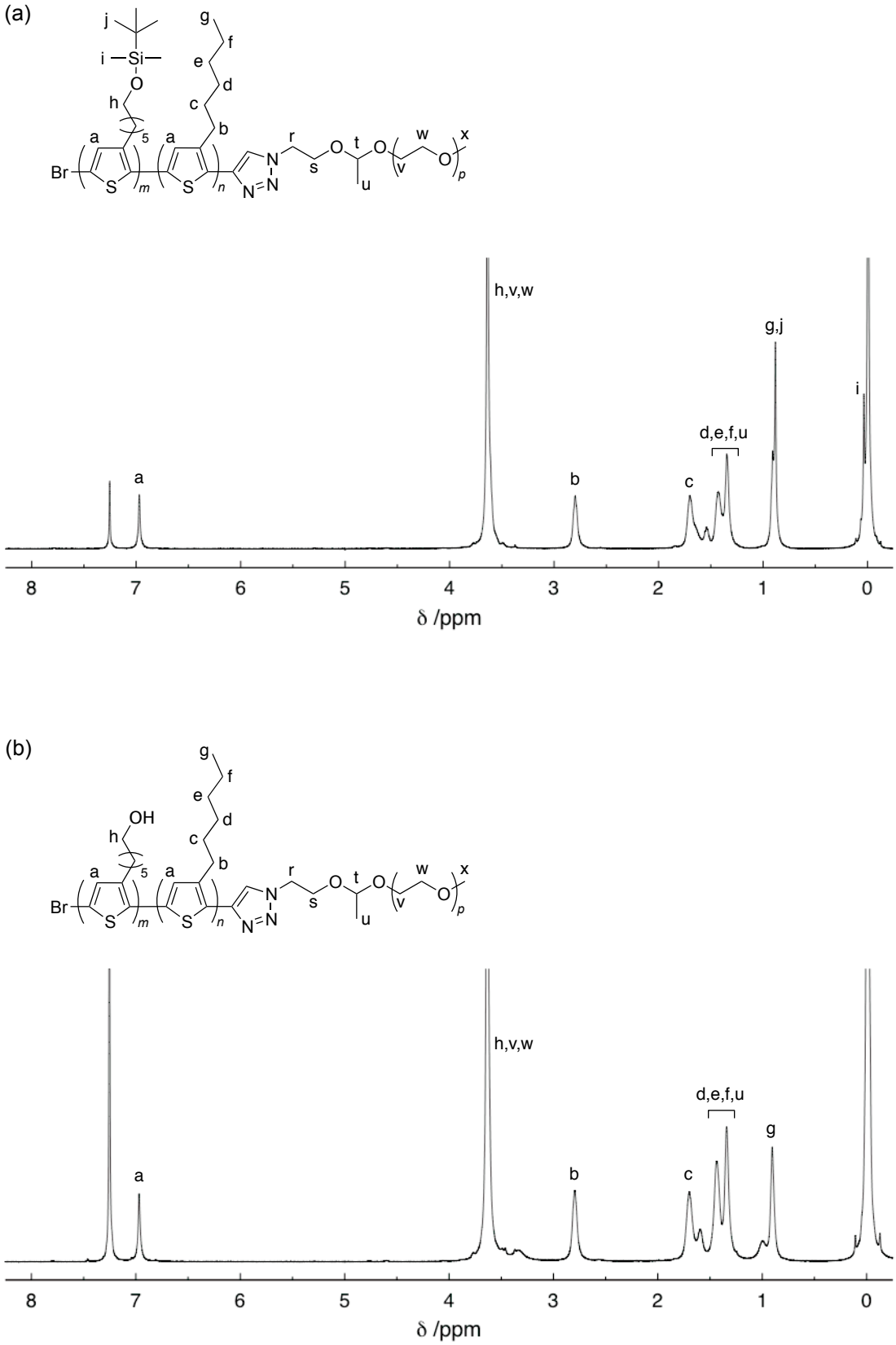

Fig. S2 ^{1}H NMR spectra. (a) ***5***, (b) ***6***.

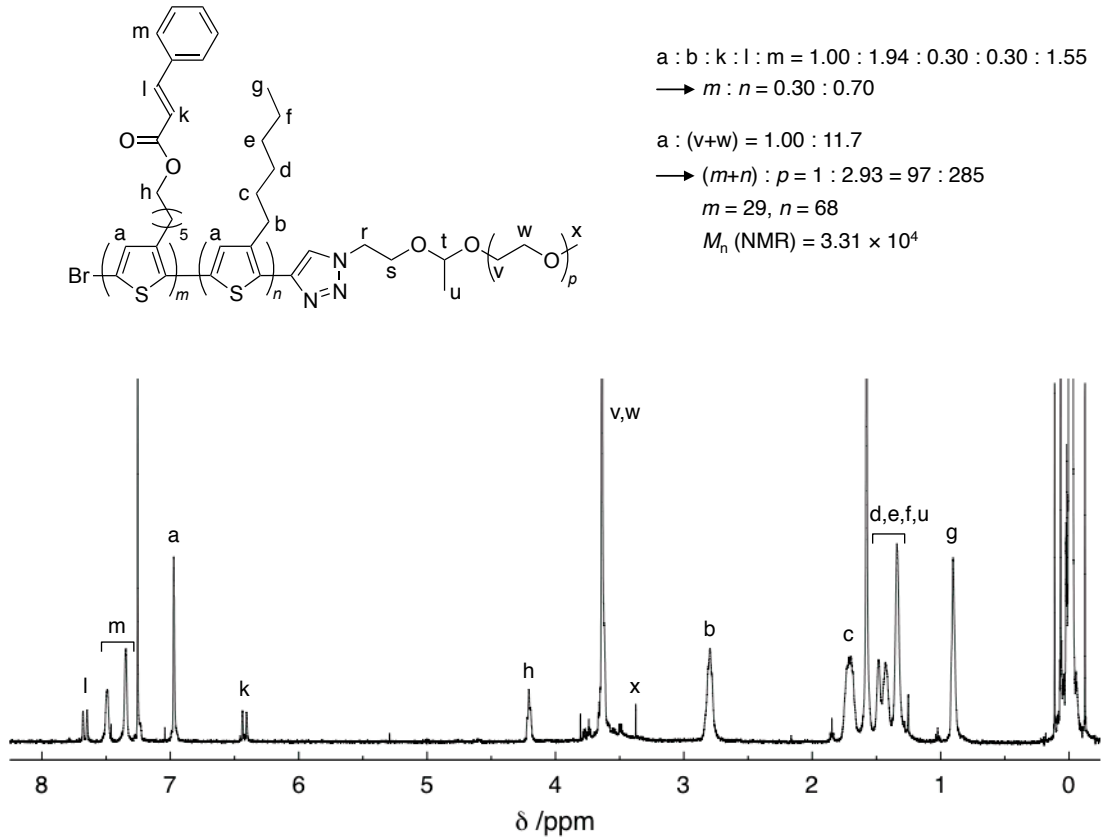

Fig. S3 ^{1}H NMR spectrum of *7*.

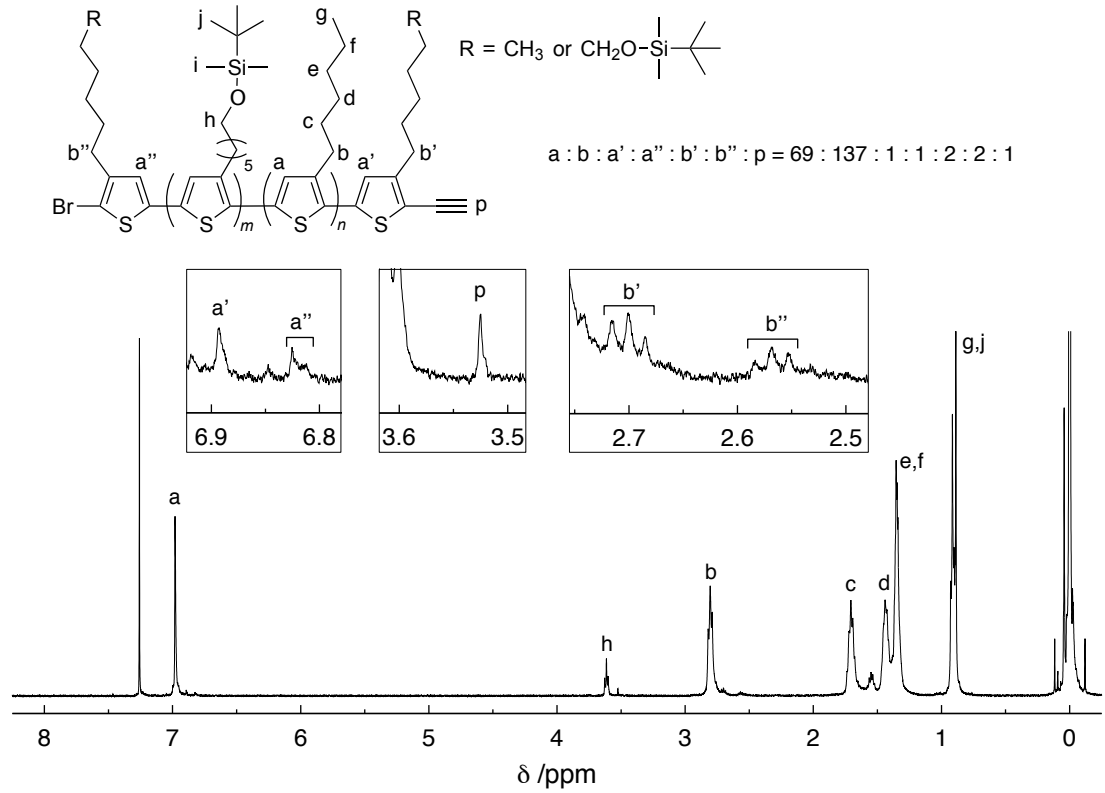

Fig. S4 ^{1}H NMR spectrum of ***3*** with lower molecular weight (M_n(GPC) = 1.24 × 10^4), which was obtained with a feed ratio of ***1*** : ***2*** : Ni(dppp)Cl$_2$ = 0.15 : 0.85 : 0.015.

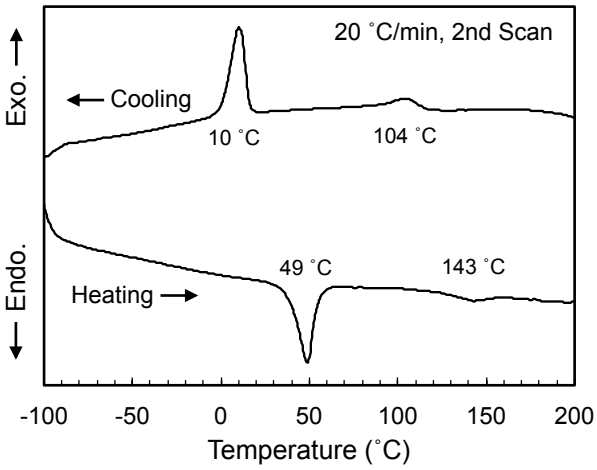

Fig. S5 DSC thermogram of *7*.

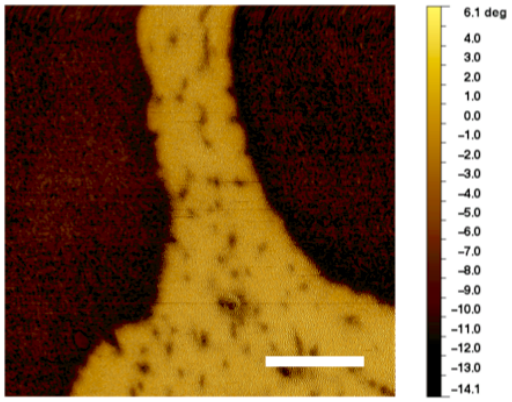

Fig. S6 AFM phase image for the blend film of PT (M_n = 1.38 × 10^4, 60 wt%) and PEO (M_n = 5.12 × 10^3, 40 wt%). Scale bar: 500 nm.

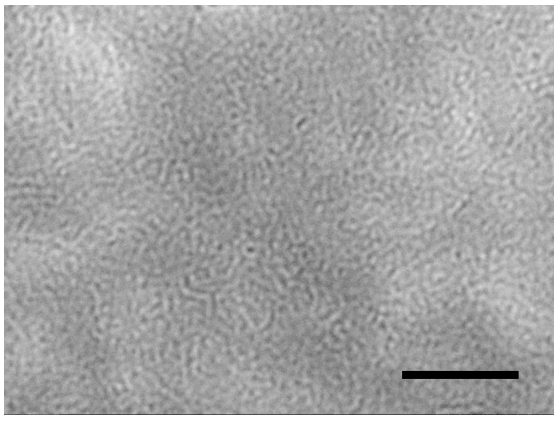

Fig. S7 TEM image for a film of *7*. Scale bar: 500 nm.

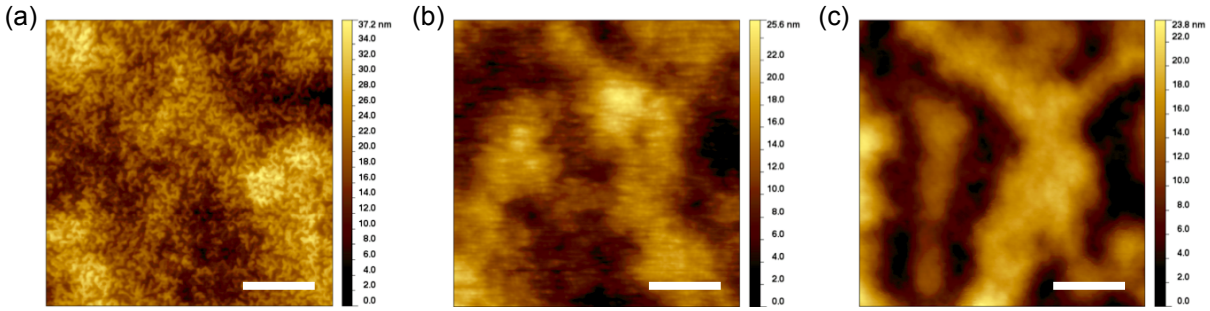

Fig. S8 AFM height images obtained simultaneously with phase images in Fig. 6. (a) After UV irradiation, (b) TFA treatment and (c) PCBM deposition. Scale bars: 500 nm.

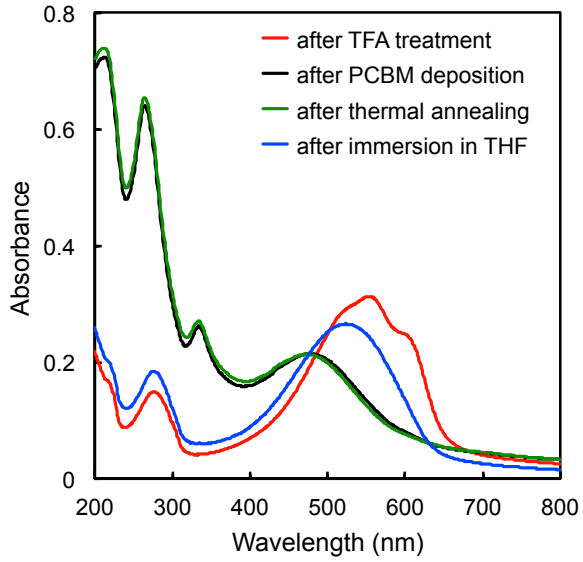

Fig. S9 Changes in absorption spectra after deposition of PCBM, thermal annealing (140˚C, 2h) and removal of PCBM.

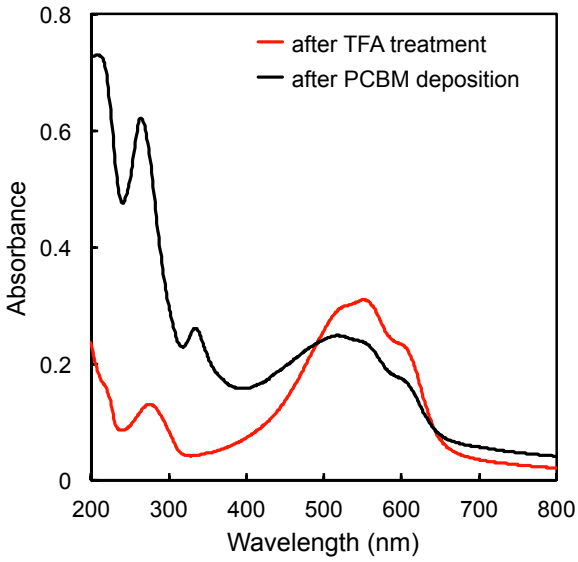

Fig. S10 UV-Vis absorption spectra of a film with a prolonged UV-irradiation time for photocrosslinking (60 min).