

Electronic Supplementary Information

Synthesis, clustering-triggered emission, explosive detection and cell imaging of nonaromatic polyurethanes

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Fig. S11 Confocal luminescent images of HeLa cells after incubation with PU₄/DMSO and DMEM solutions (5 mg mL⁻¹, 1.5 h) and Nile red (0.314 μ M, 5 min). Confocal images recorded under excitation at (A) 405 and (B) 561 nm, (C) bright field image and (D) corresponding overlayed image.

Fig. S12 Confocal images of the control HeLa cells. (A) Confocal image recorded under excitation at 405 nm, (B) bright field image and (C) corresponding overlayed image.

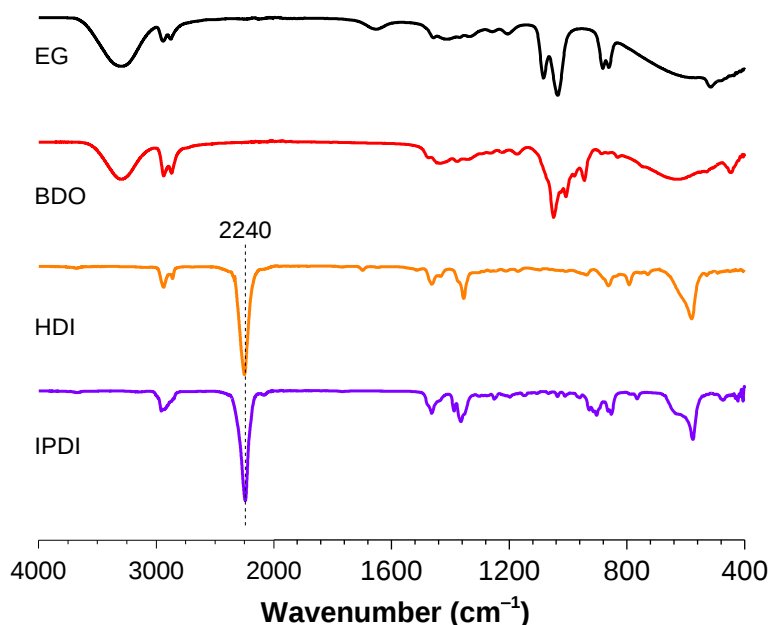


Fig. S1 ATR spectra of EG, BDO, HDI and IPDI.

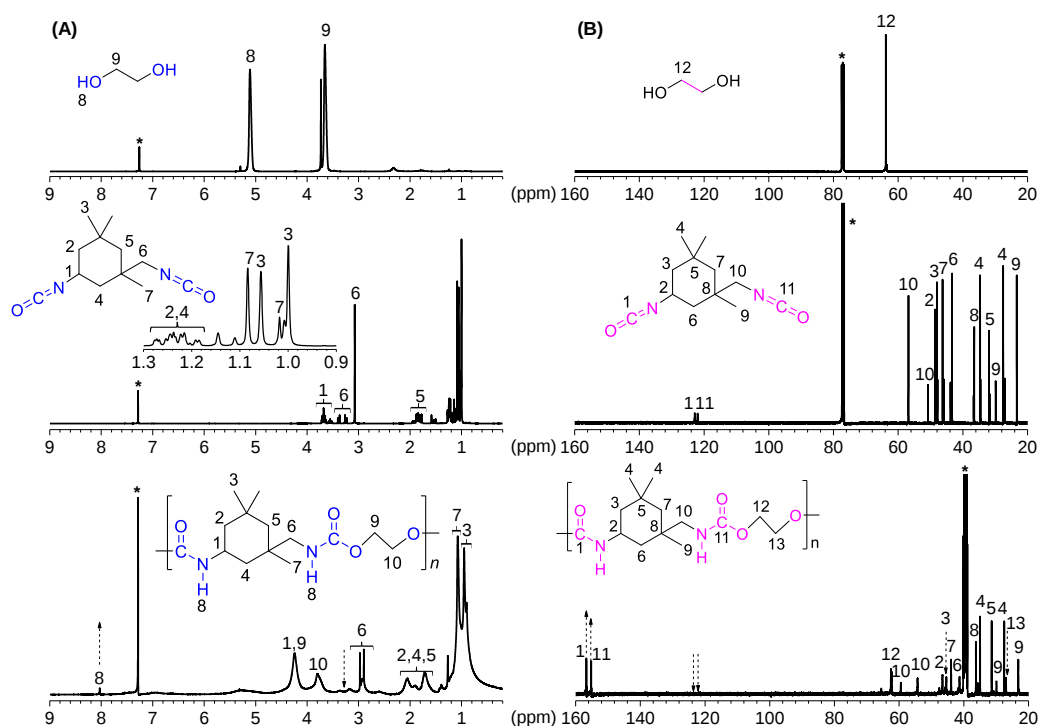


Fig. S2 ^1H and ^{13}C NMR spectra of EG, IPDI and PU₃ in CDCl_3 and $\text{DMSO}-d_6$.

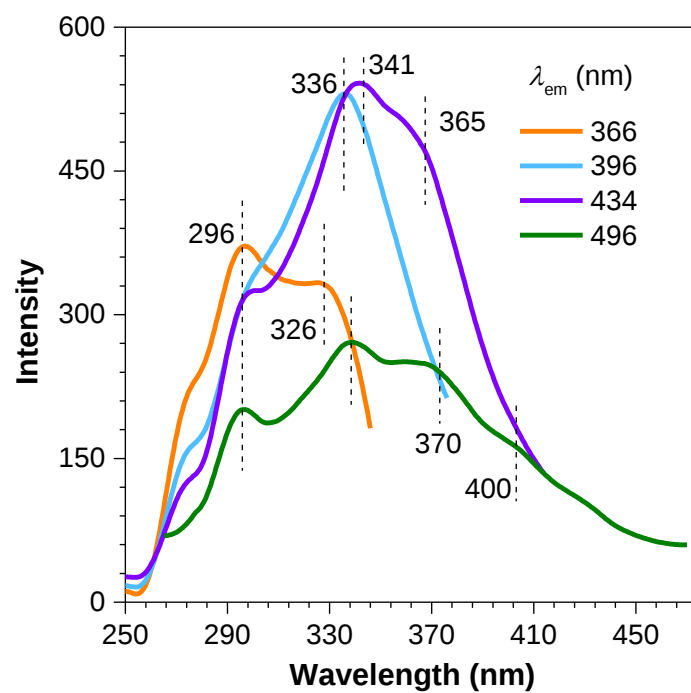


Fig. S3 Excitation spectra of 200 mg mL^{-1} PU₄/DMF solution with different λ_{em} s.

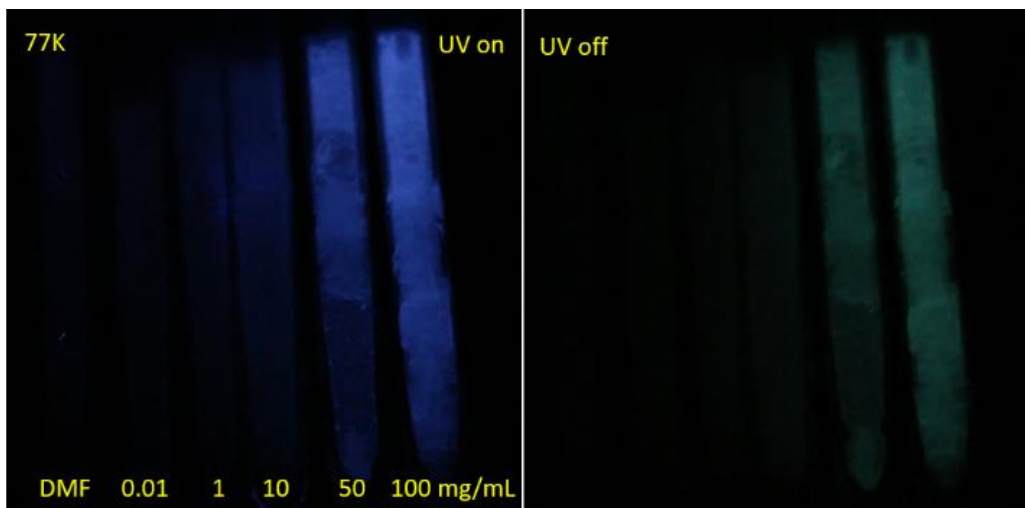


Fig. S4 Photographs of PU₄/DMF solutions at different concentrations taken at 77 K under 365 nm UV light or after ceasing the UV irradiation.

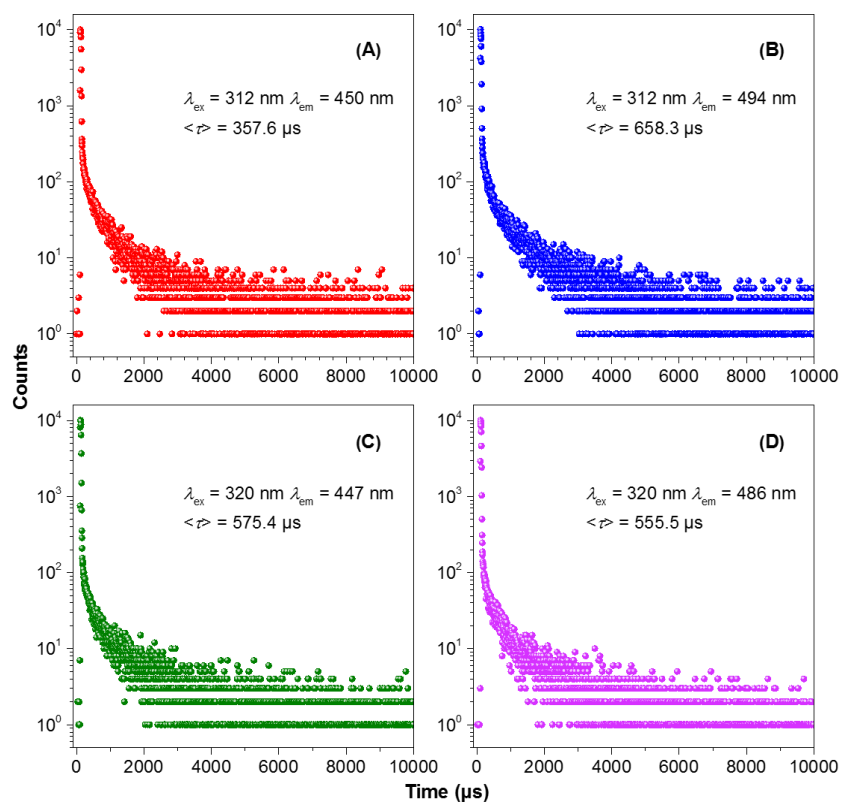


Fig. S5 Time-resolved decay spectra of the PU₄ solid and film.

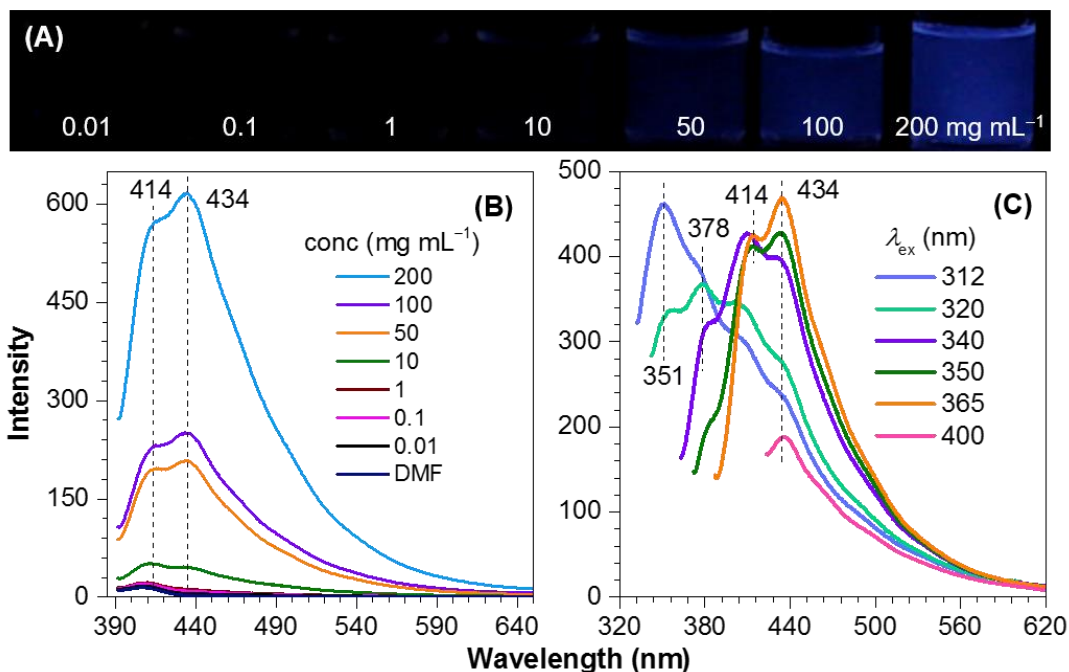


Fig. S6 (A) Photographs taken under 365 nm UV light and (B) emission spectra of different PU_3/DMF solutions. (C) Emission spectra of 200 mg mL^{-1} PU_3/DMF solution with different λ_{ex} .

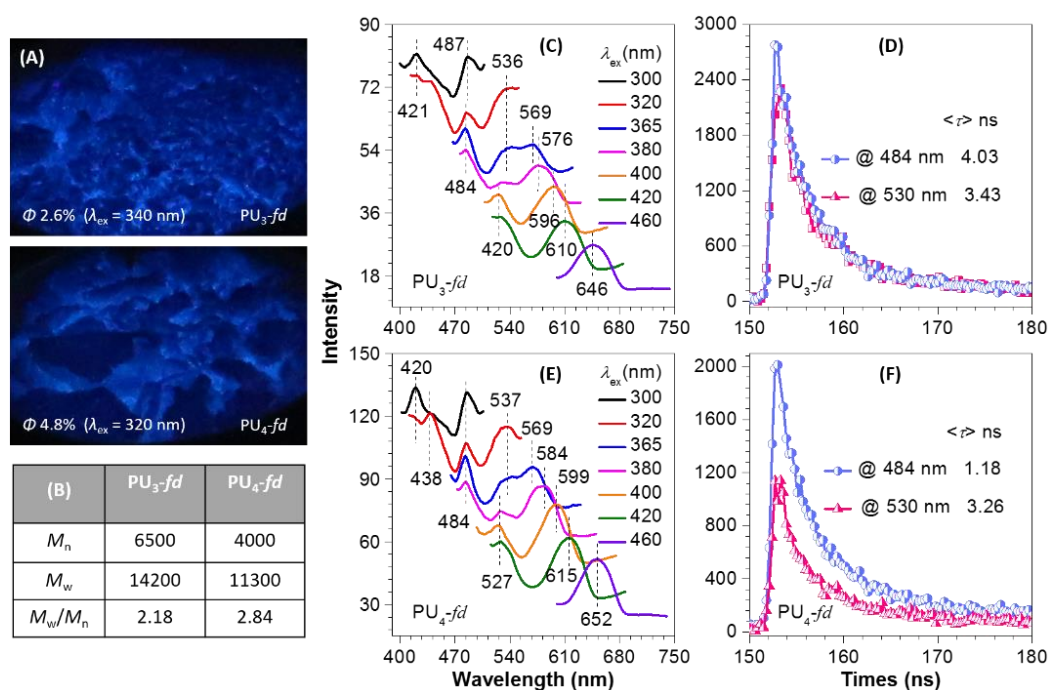


Fig. S7 (A) Photographs taken at 77 K under 365 nm UV light, (B) molecular weight, (C, E) emission spectra and (D, F) lifetimes of $\text{PU}_3\text{-fd}$ and $\text{PU}_4\text{-fd}$ powders.

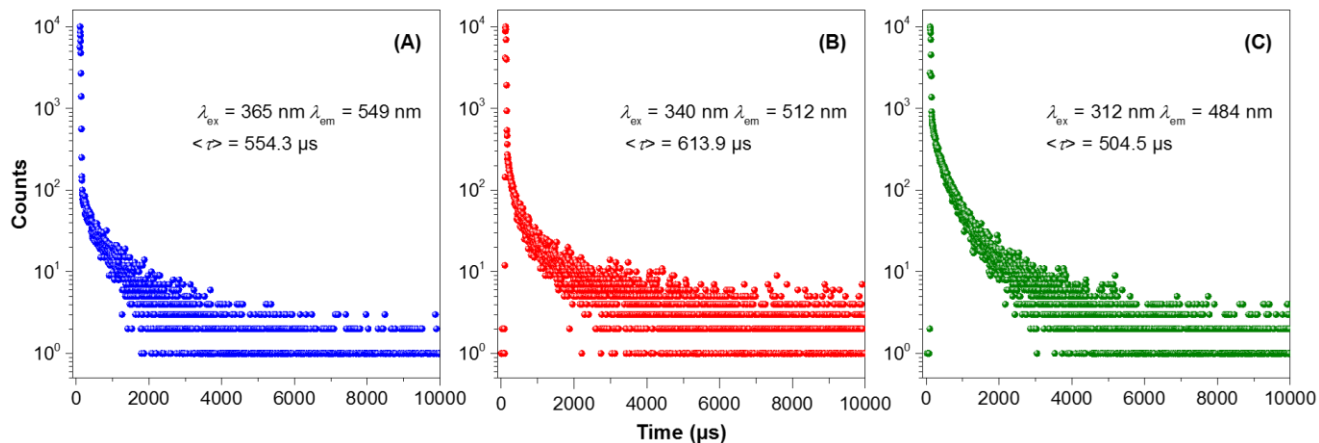


Fig. S8 Time-resolved decay spectra of PU₁, PU₂ and PU₃ solids.

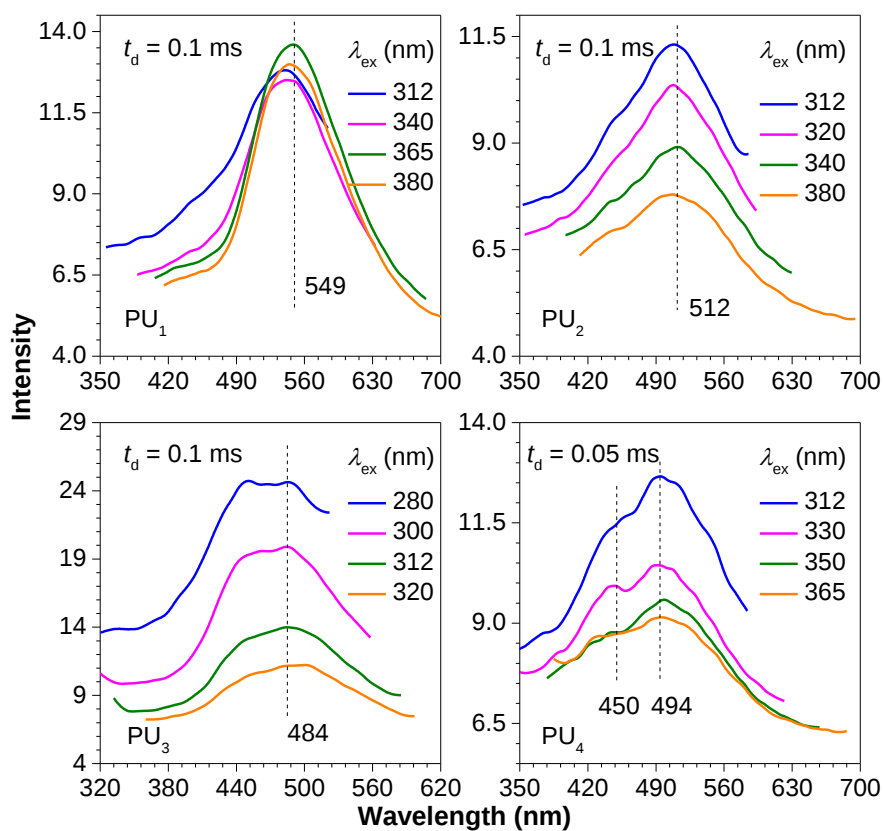


Fig. S9 Emission spectra of PU₁, PU₂, PU₃ and PU₄ solids with the delay time (t_d) of 0.1 or 0.05 ms under varying λ_{ex} s.

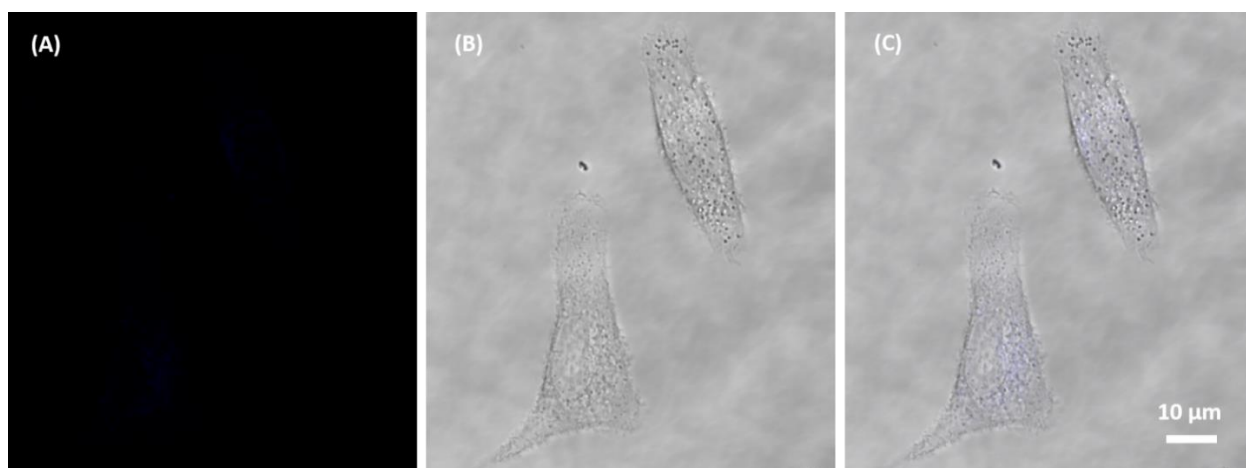


Fig. S10 Confocal images of the control HeLa cells. (A) Confocal image recorded under excitation at 405 nm, (B) bright field image and (C) corresponding overlaid image.

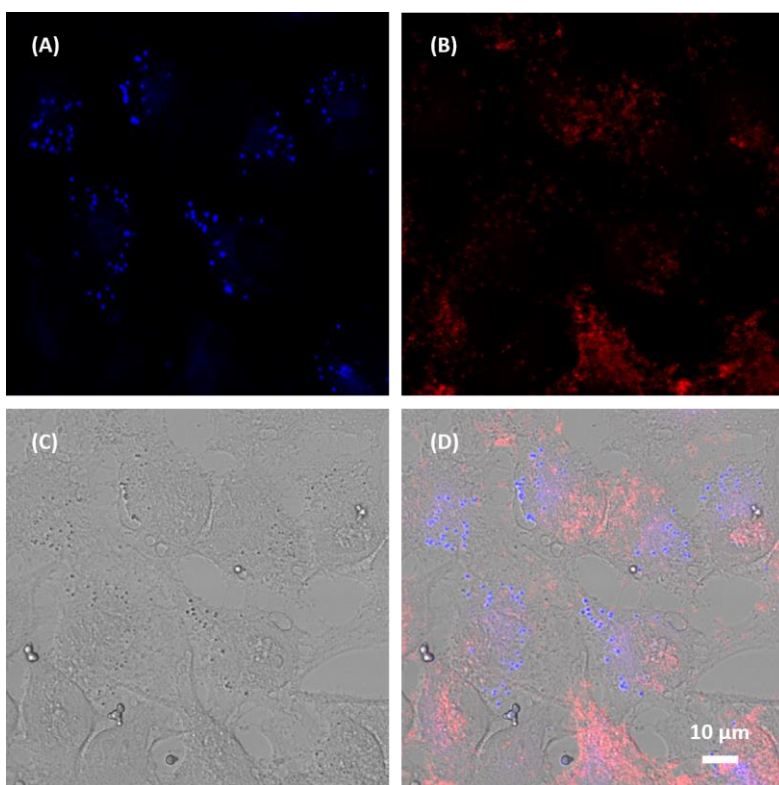


Fig. S11 Confocal luminescent images of HeLa cells after incubation with PU₄/DMSO and DMEM solutions (5 mg mL⁻¹, 1.5 h) and Nile red (0.314 μM, 5 min). Confocal images recorded under excitation at (A) 405 and (B) 561 nm, (C) bright field image and (D) corresponding overlaid image.

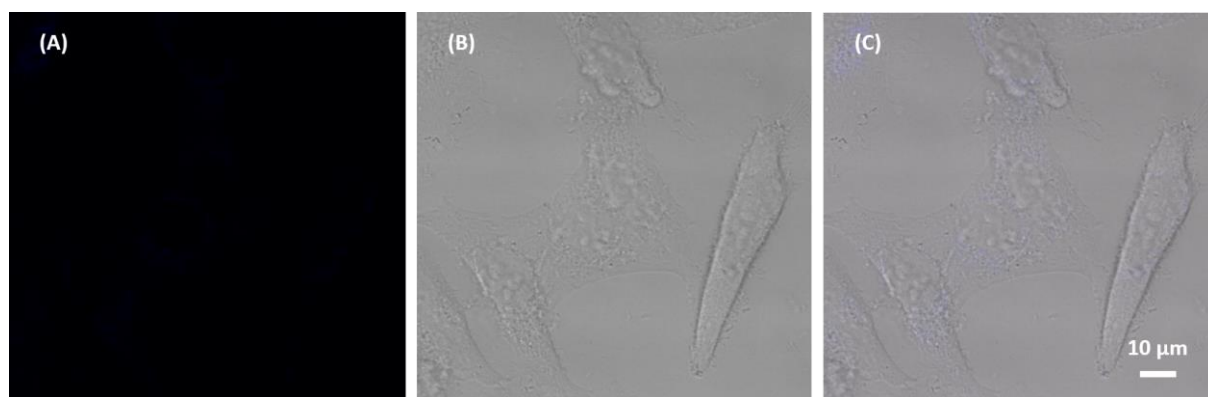


Fig. S12 Confocal images of the control HeLa cells. (A) Confocal image recorded under excitation at 405 nm, (B) bright field image and (C) corresponding overlaid image.