

## **Journal Name**

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## **Electronic Supplementary Information**

## Light-triggered "on-off" switching of fluorescence based on a naphthopyrancontaining compound polymer micelle

Dehua Li, a, Jinhui Jiang, b, Qiutong Huang, b, Guang Wang\*a Meiduo Zhang, and Jianzhong Du\*b, C

<sup>&</sup>lt;sup>a</sup> Faculty of Chemistry, Northeast Normal University, Changchun 130024, P R China

<sup>&</sup>lt;sup>b</sup> Department of Polymeric Materials, School of Materials Science and Engineering, Tongji University, 4800 Caoan Road, Shanghai 210804, PR China

<sup>&</sup>lt;sup>c</sup> Shanghai Tenth People's Hospital, Tongji University School of Medicine, Shanghai 200072, China

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Fig. S 1 Synthesis of P(St-stat-MANI)-b-PNIPAM diblock copolymer.

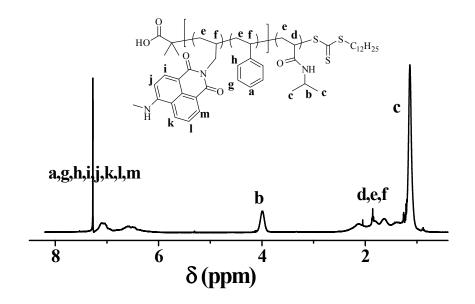


Fig. S 2 <sup>1</sup>H NMR spectrum of P(St-stat-MANI)-b-PNIPAM diblock copolymer.

**Fig. S 3** Synthesis of P(St-*stat*-NP)-*b*-PNIPAM diblock copolymer.

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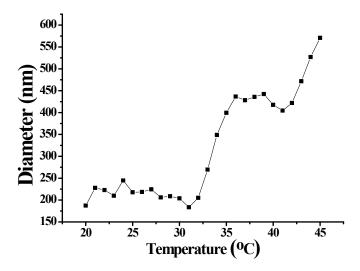


Fig. S 4 The hydrodynamic diameters of compound micelles by increasing temperature from 20 °C to 45 °C.

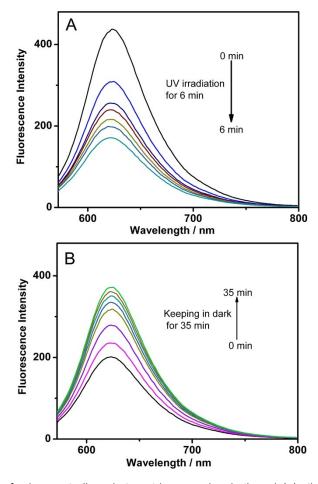


Fig. S 5 Fluorescent emission spectra of polymer micelles solution with encapsulated Nile Red: (A) Nile Red was released under UV (365 nm) irradiation and (B) Nile Red was gradually re-encapsulated into the reorganized micelles after removing UV irradiation.