

# **Synthesis and sequence-controlled self-assembly of amphiphilic triblock copolymers based on functional poly (ethylene glycol)**

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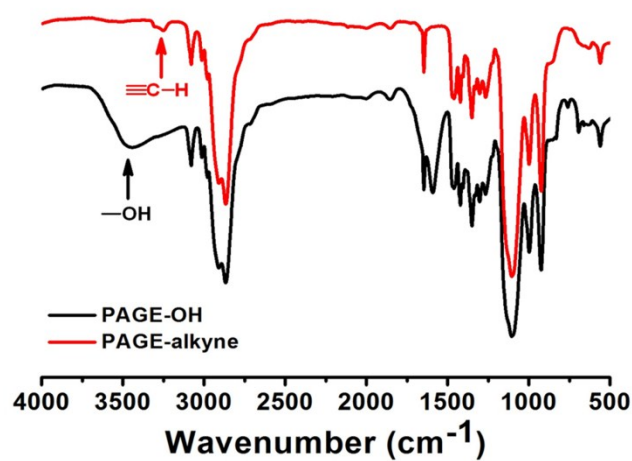
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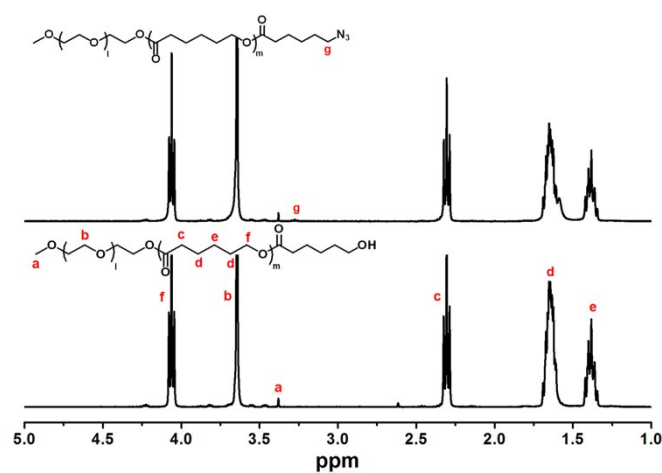
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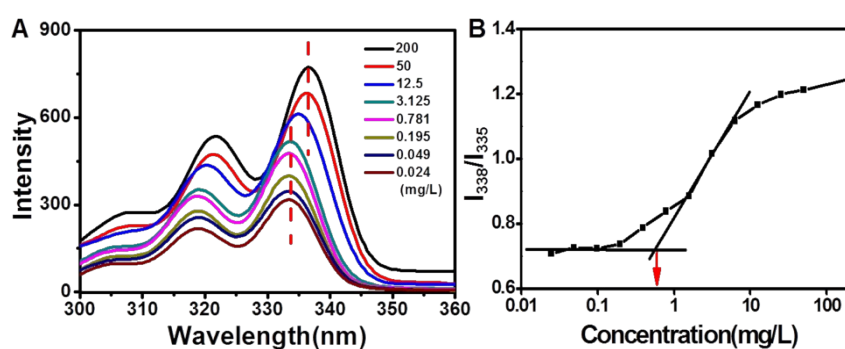
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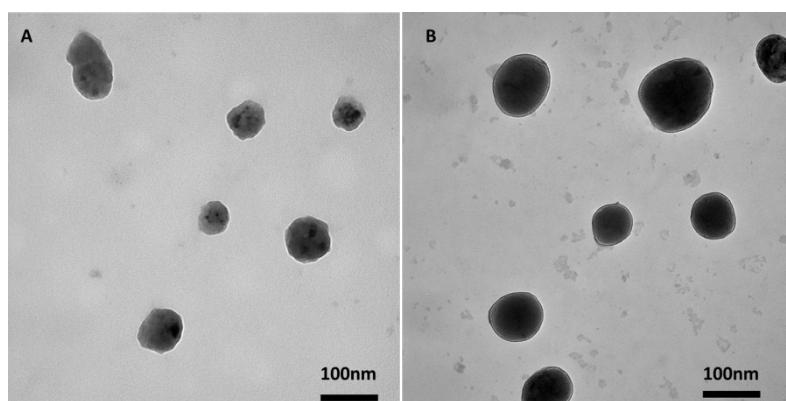
**Fig.S1** The FTIR analyses of PAGE-OH and PAGE-alkyne.



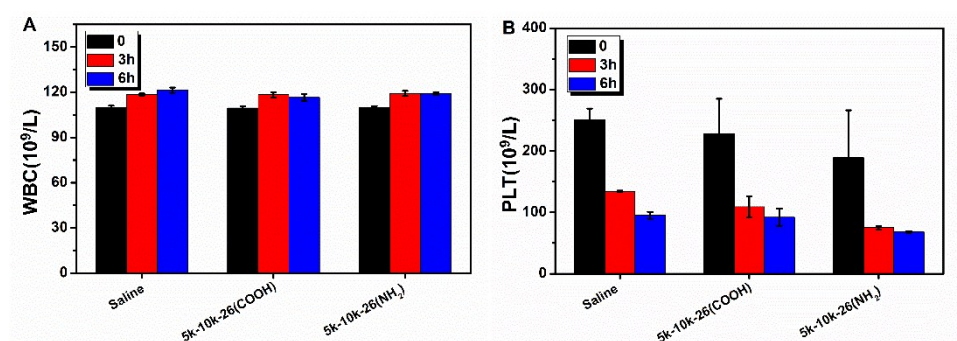
**Fig.S2** <sup>1</sup>H NMR spectrum of mPEG -PCL-N<sub>3</sub> (400M, CDCl<sub>3</sub>)



**Fig.S3** Excitation spectra of pyrene in aqueous solution of mPEG<sub>5k</sub>-PCL<sub>10k</sub>-PAGE<sub>26</sub> (NH<sub>2</sub>) with various concentrations(A); Plot of  $I_{338}/I_{335}$  vs.  $\log C$  of mPEG<sub>5k</sub>-PCL<sub>10k</sub>-PAGE<sub>26</sub> (NH<sub>2</sub>) in aqueous solution (B).



**Fig.S4** TEM images of the micelles formed of mPEG<sub>5k</sub>-PCL<sub>10k</sub>-PAGE<sub>26</sub> (COOH) (A) and mPEG<sub>5k</sub>-PCL<sub>10k</sub>-PAGE<sub>26</sub> (NH<sub>2</sub>) (B).



**Fig.S5** The white blood cell(WBC) counting (A) and blood platelet (PLT) counting (B) of the rat blood mixed with the micelle dispersions in vitro at different time of incubation. Saline solution served as the control group. All the data are expressed as mean±SD (n=3).