

Electronic Supporting Information for

## Synthesis of novel guanidine-based ABA triblock copolymers and their antimicrobial honeycomb films

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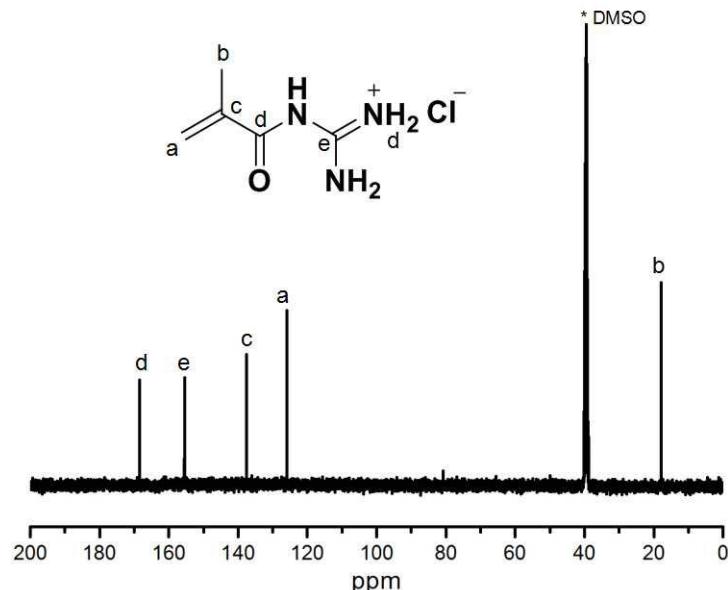


Fig. S1 <sup>13</sup>C NMR spectrum of MAGH.

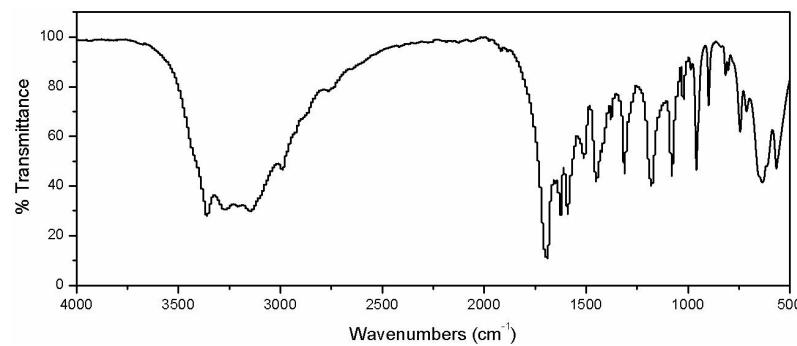
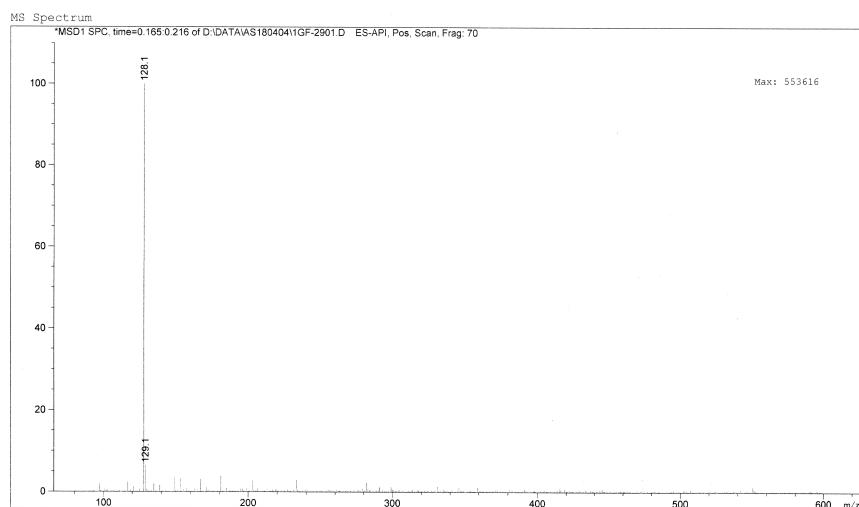
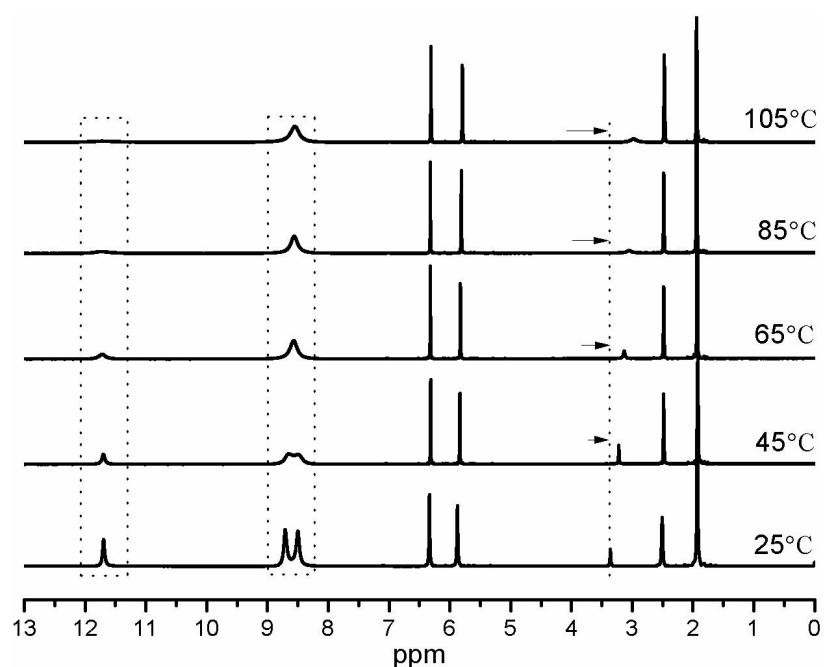


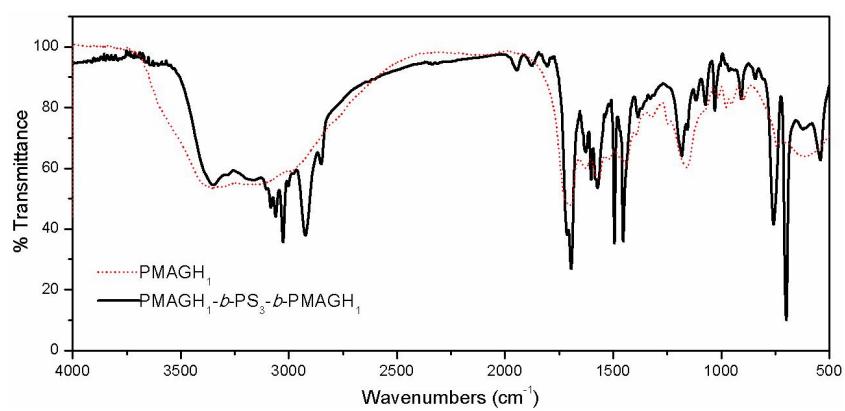
Fig. S2 FT-IR spectrum of MAGH.



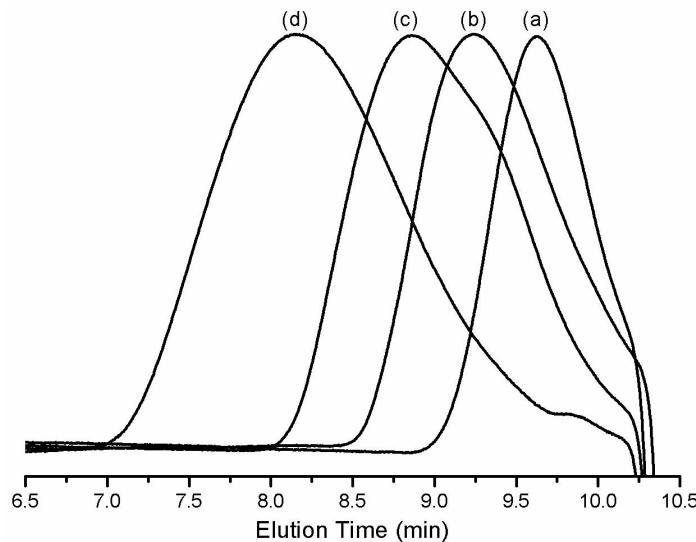
**Fig. S3** Mass spectrum (ESI<sup>+</sup>) of MAGH.



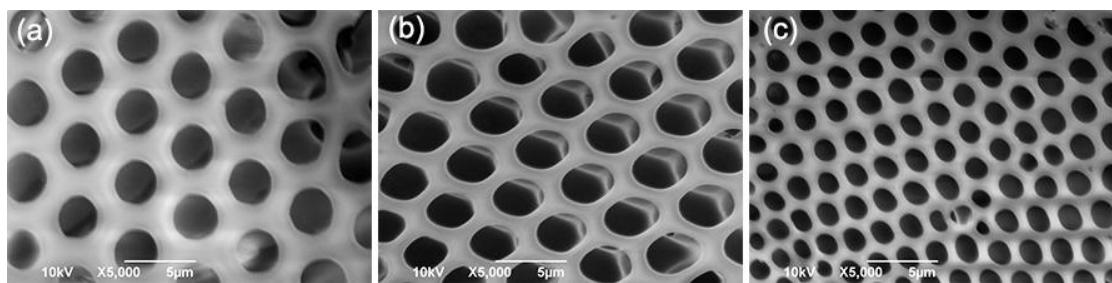
**Fig. S4** <sup>1</sup>H NMR spectrum of MAGH collected at different temperatures.



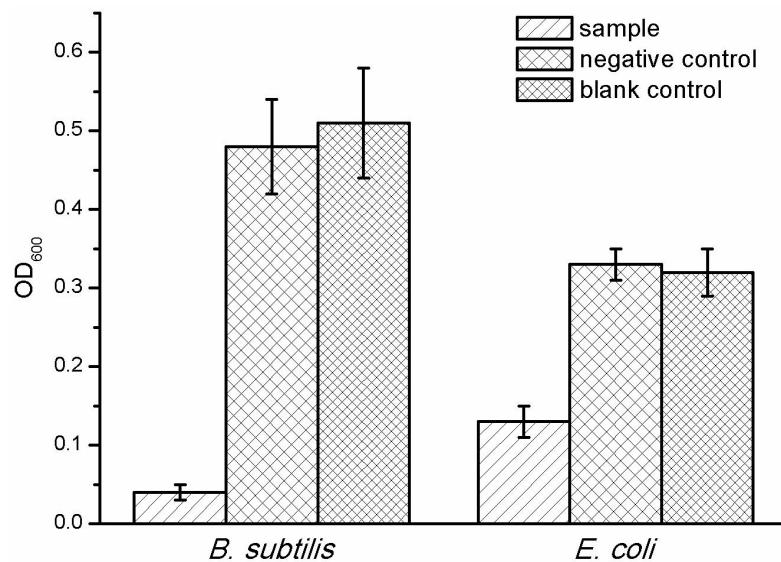
**Fig. S5** FT-IR spectrum of of PMAGH and PMAGH-*b*-PS<sub>3</sub>-*b*-PMAGH.



**Fig. S6** GPC traces of MAGH homopolymers. (a) PMAGH<sub>1</sub> ( $M_n = 6.5\text{k}$ ,  $D = 1.21$ ); (b) PMAGH<sub>2</sub> ( $M_n = 8.1\text{k}$ ,  $D = 1.37$ ); (c) PMAGH<sub>3</sub> ( $M_n = 11.4\text{k}$ ,  $D = 1.64$ ); (d) PMAGH<sub>4</sub> ( $M_n = 47.3\text{k}$ ,  $D = 1.55$ ).



**Fig. S7** SEM images of honeycomb films fabricated from PMAGH-*b*-PS<sub>3</sub>-*b*-PMAGH solution in CHCl<sub>3</sub> at 40 °C and 95% R.H. via a static BF process at different concentration: (a) 5 mg mL<sup>-1</sup>, (b) 10 mg mL<sup>-1</sup> and (c) 20 mg mL<sup>-1</sup>.



**Fig. S8** Optical density (OD) of bacterial suspensions detected at wavelength of 600 nm. Sample: PMAGH-*b*-PS<sub>3</sub>-*b*-PMAGH honeycomb films; negative control: PS honeycomb films; blank control: no honeycomb film.