Electronic Supplementary Material (ESI) for Soft Matter.

Self-Assembly and Nanoaggregation from a pH Responsive DNA Hybrid Amphiphile

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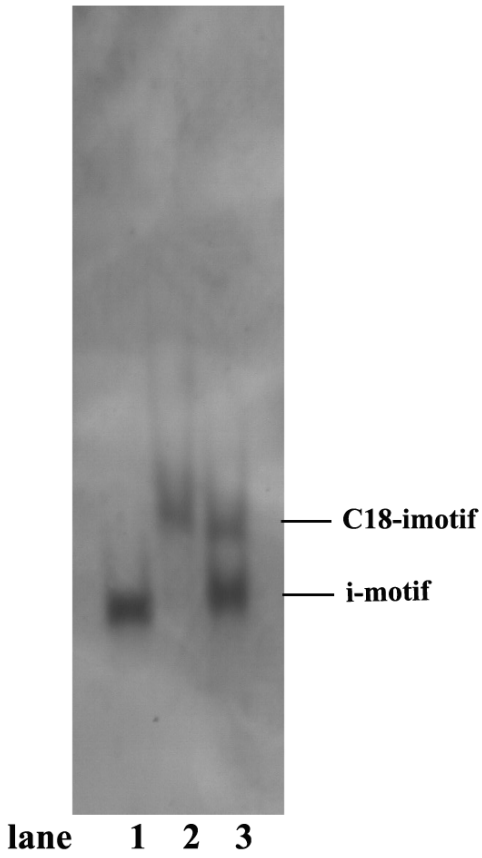

Fig. S1 20% Denaturing polyacrylamide gel electrophoresis (Acr: acrylamide, Bis: N, N'-methylenebisacrylamide; Acr/Bis = 19:1). Lanes 1, 2 and 3 were pure i-motif solution, purified C18-imotif solution, and isometric mixture of C18-imotif solution and i-motif solution, respectively.

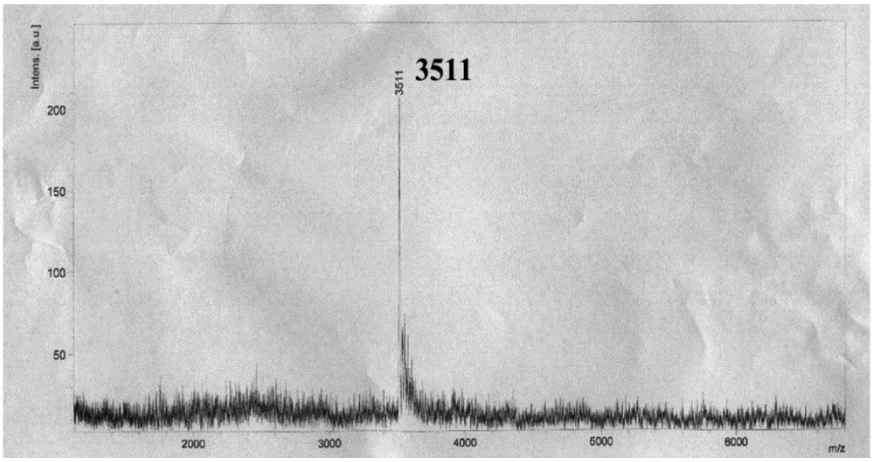

Fig. S2 MALDI-TOF spectrum of C18-imotif.

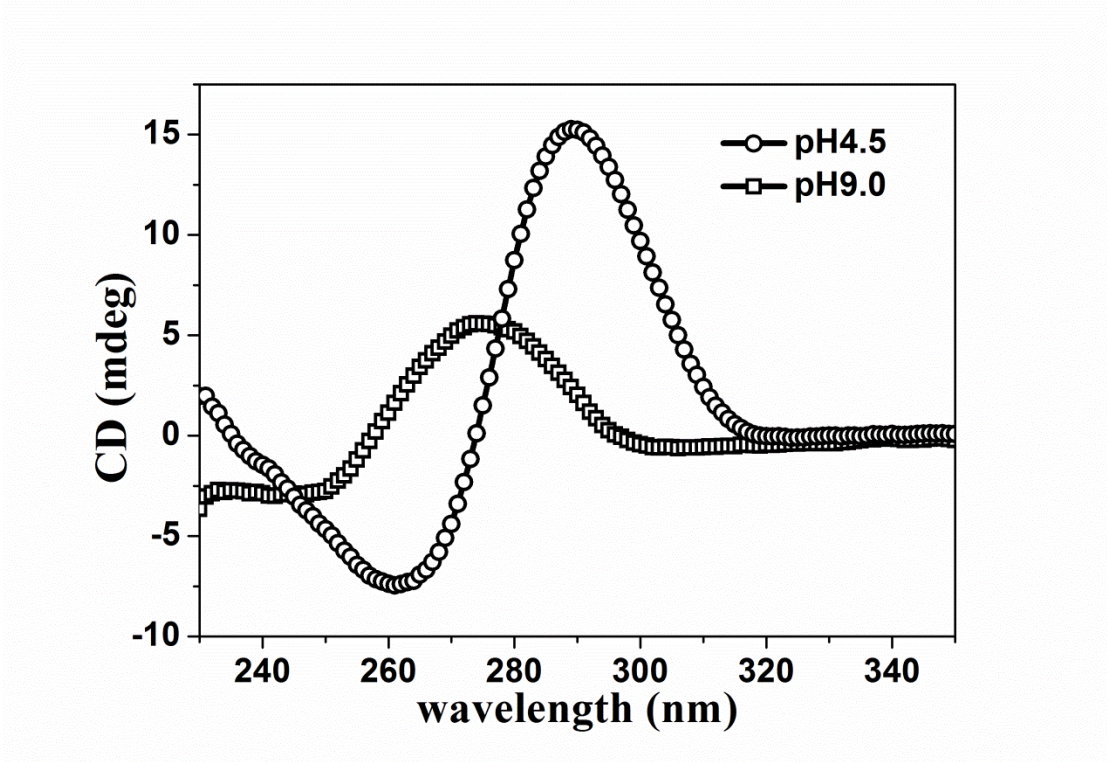

Fig. S3 CD spectra of 50 μM C18-i-motif at pH 4.5 and pH 9.0 at room temperature, respectively.

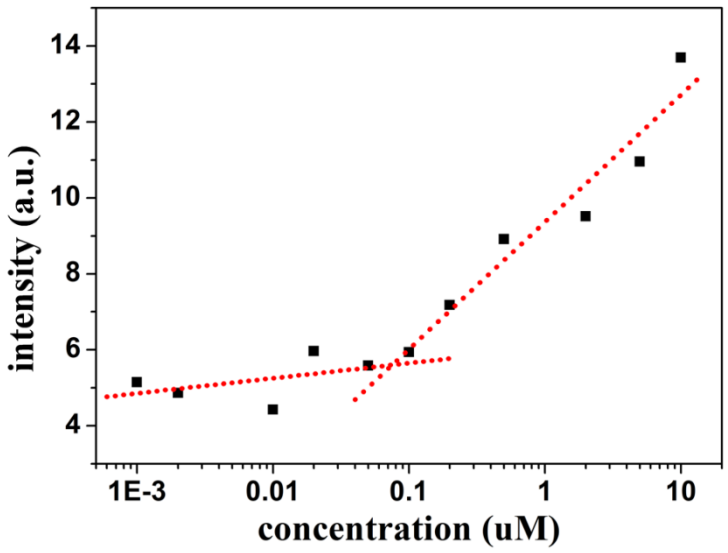

Fig. S4 CMC determination of C18-i-motif at pH 9.0. by using Nile read as the probe (excitation at 550nm and emission at 630 nm).

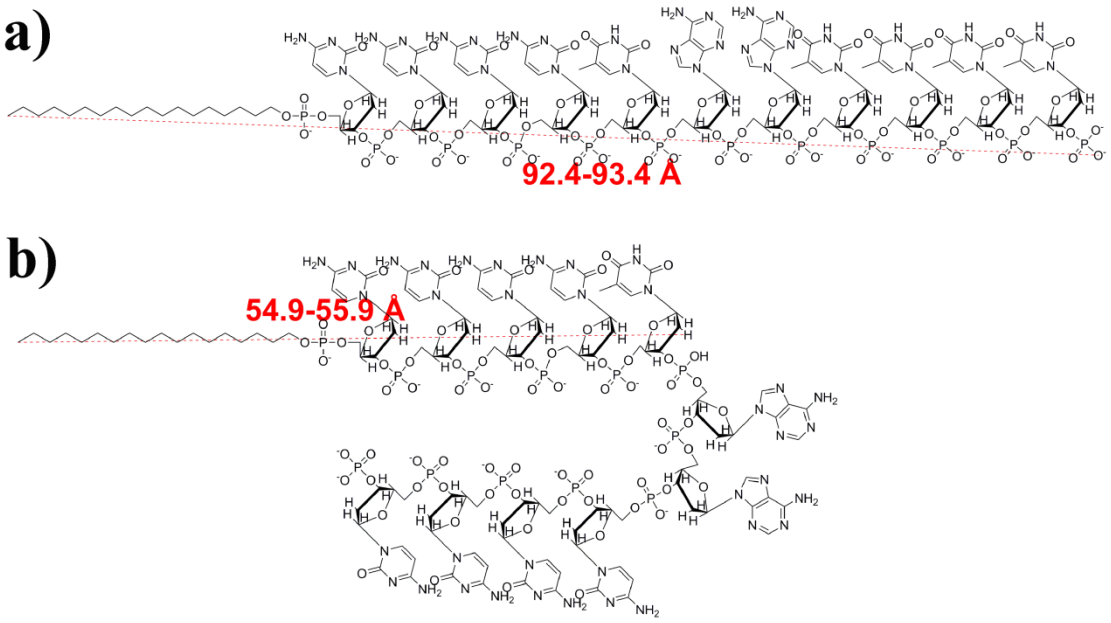

Fig. S5 Molecular structures and lengths of C18-i-imotif at (a) pH 9.0 and (b) pH 4.5.

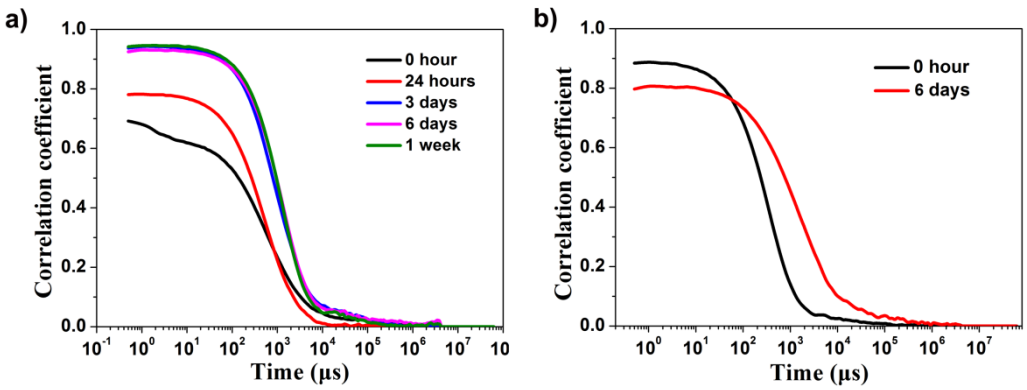

Fig. S6 DLS autocorrelation functions of 5 μM C18-i-motif with time after annealing at (a) pH 9.0 and (b) pH 4.5.

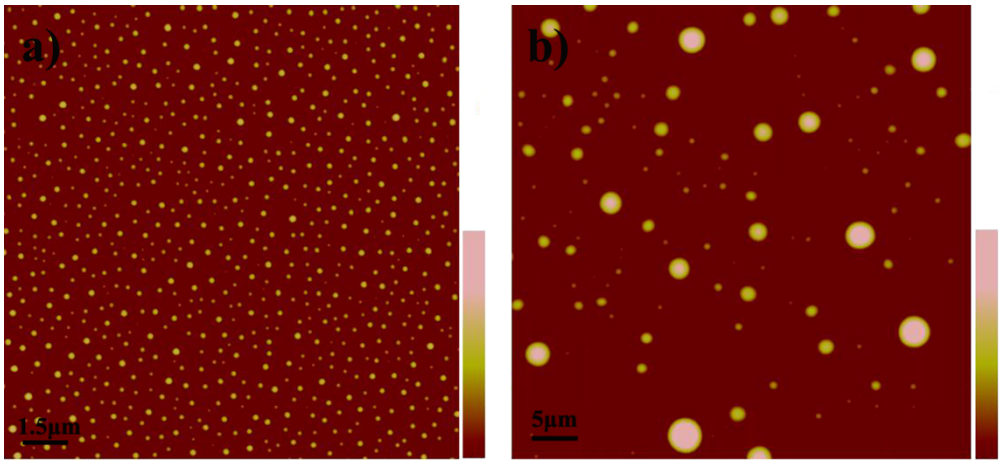

Fig. S7 AFM images of 5 μM C18-imotif at pH 9.0 incubated for (a) 0 h and (b) 7 days after annealing.