

Supporting Information

Self-assembly and Functionalization of Alternating Copolymer Vesicles

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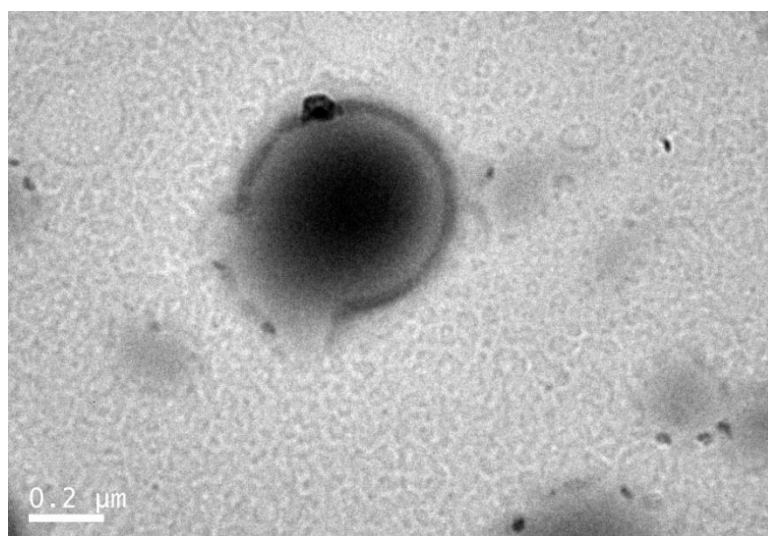


Fig. S1 TEM image of a fractured vesicle originated from alternating copolymer P(DHO-a-DHBDT).

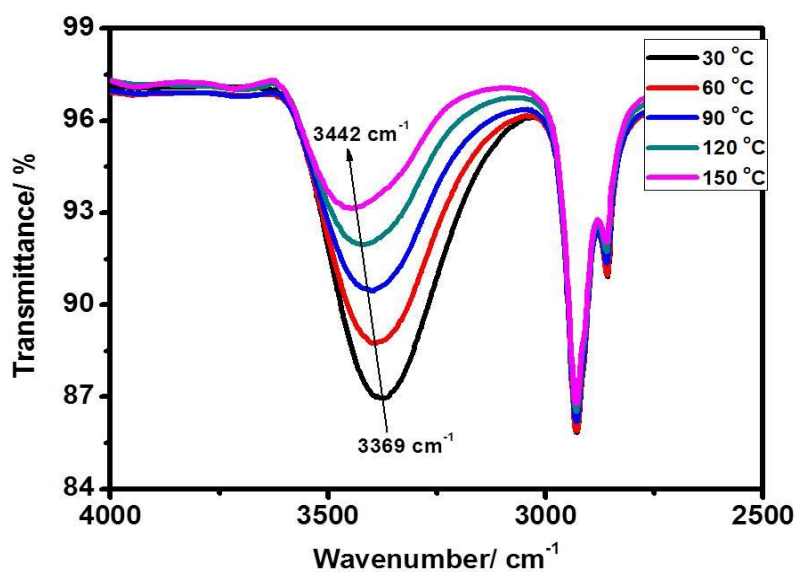


Fig. S2 Variable temperature FTIR spectra of dried vesicles from P(DHO-a-DHBDT) molecules. With increasing temperature from 30 °C to 150 °C, the peak of the hydroxyl groups gradually became narrower and shifted to the high wavelength side, which clearly indicated that hydroxyl groups had formed hydrogen bonds in the dried P(DHO-a-DHBDT) vesicles.

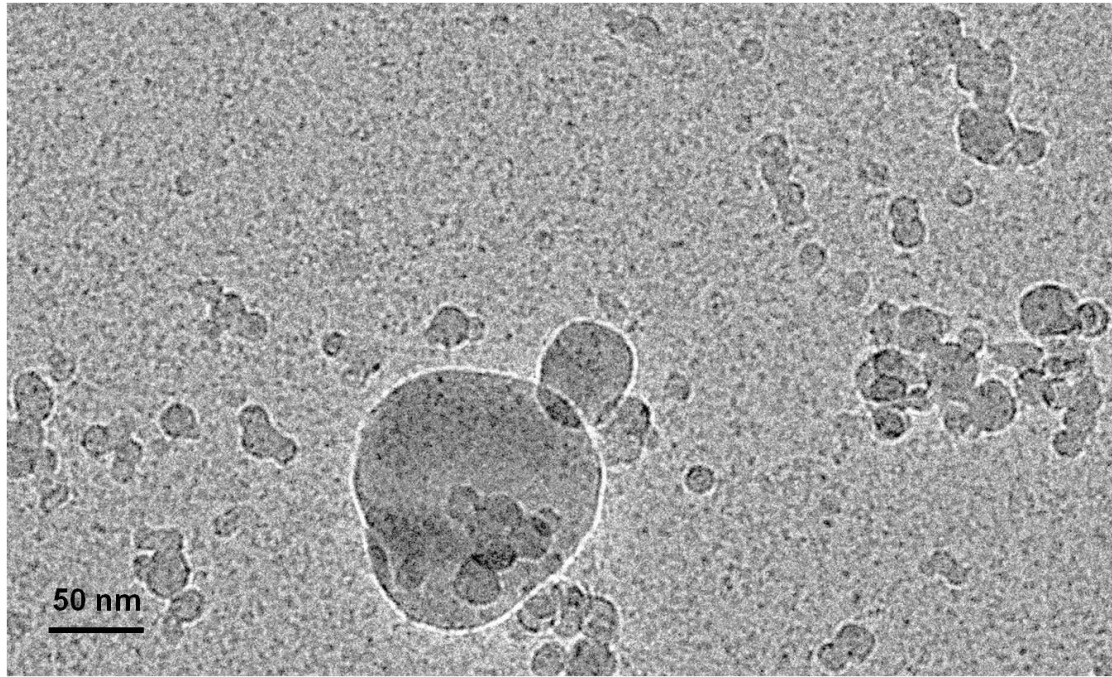


Fig. S3 The cryo-TEM image of P(DHO-a-DHBDT) alternating copolymer vesicles.

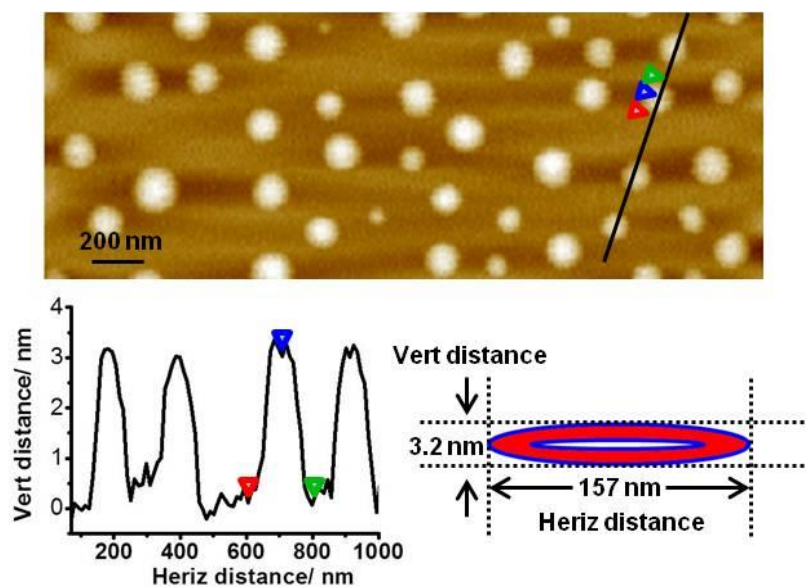


Fig. S4 The AFM cross section analyses for P(DHO-a-DHBDT) vesicles. Botom left is the line profile of the selected cross section. Botom right is a cartoon illustration of cross section of a collapsed vesicle. The sample was prepared with a lower concentration. In particular, 10 μL 1 mg/mL DMF solution of P(DHO-a-DHBDT) was injected into 1 mL deionized water to trigger self-assembly. One drop of the vesicle solution was added onto the surface of fresh cleaved mica, then a filtrate paper was used to absorb redundant water leaving a thin water film on mica plate. After that, the sample was dried under vacuum at room temperature for 24 h and then at 60 $^{\circ}\text{C}$ for another 24 h to make the vesicles collapsed completely onto the surface of mica.