Supporting Information

Mechanical Properties of Block Copolymer Vesicle Membranes by Atomic Force Microscopy

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Figure S1. Histograms of the observed radii of the spherical caps for (a) $PS_{115}$-b-$PAA_{15}$; (b) $PS_{139}$-b-$PAA_{17}$; (c) $PS_{182}$-b-$PAA_{19}$ and (d) $PS_{403}$-b-$PAA_{62}$. 
Figure S2. Histograms of the calculated apparent Young’s moduli of the membranes for (a) PS115-b-PAA15; (b) PS139-b-PAA17; (c) PS182-b-PAA19 and (d) PS403-b-PAA62.
Figure S3. Histogram of the spring constants of the membranes for (a) PS<sub>115</sub>-b-PAA<sub>15</sub>; (b) PS<sub>139</sub>-b-PAA<sub>17</sub>; (c) PS<sub>182</sub>-b-PAA<sub>19</sub> and (d) PS<sub>403</sub>-b-PAA<sub>62</sub>. 
Figure S4. Apparent Young’s moduli of various PS-b-PAA membranes vs. radius of the spherical caps.

Figure S5. TM-AFM image showing a few buckled vesicles after the indentation test.