

## Synthesis of Controlled, High-Molecular Weight Poly(L-Glutamic Acid) Brush Polymers

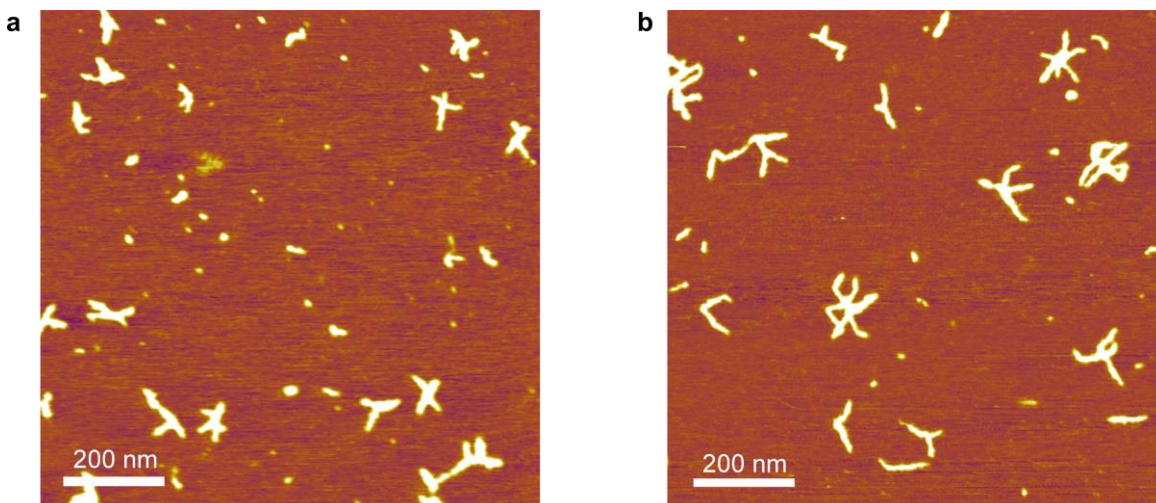
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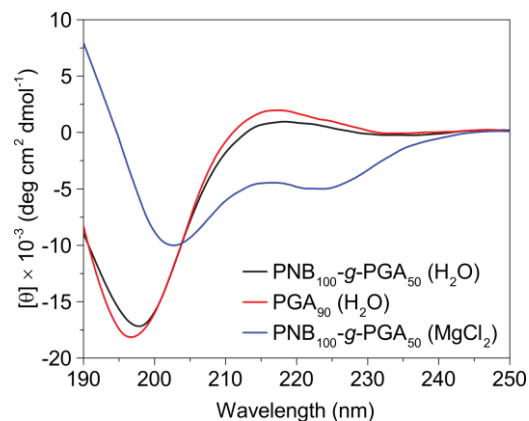
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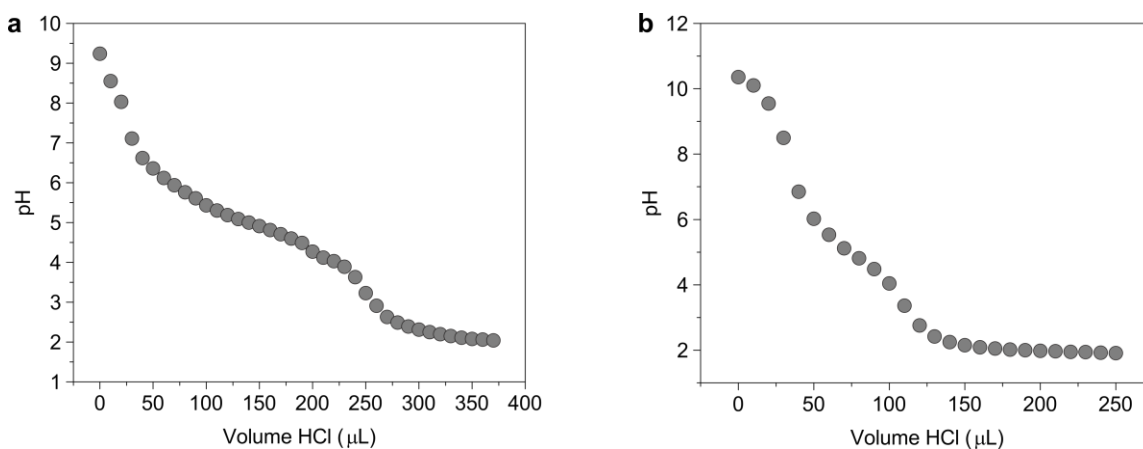
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**Figure S1.** **a.** AFM height image of PNB<sub>100</sub>-g-PGA<sub>50</sub>. **b.** AFM height image of PNB<sub>200</sub>-g-PGA<sub>50</sub>.



**Figure S2.** Circular dichroism (CD) spectra of PNB<sub>100</sub>-g-PGA<sub>50</sub> (black) and PGA<sub>90</sub> (red) in H<sub>2</sub>O, and PNB<sub>100</sub>-g-PGA<sub>50</sub> in 1.0 mM MgCl<sub>2</sub> (blue).



**Figure S3.** a. Titration of PGA<sub>90</sub> with HCl. b. Titration of PGA<sub>100</sub>-g-PGA<sub>50</sub> with HCl.

**Table S1. Drug Loading of CPT-Gly onto PGA based Polymers.**

Entry	Attempted Drug Loading (wt%)	Measured Drug Loading (wt%)	Loading Efficiency (%)
1	19	11	57
2	38	27	73
3	76	12	16
4 <sup>†</sup>	38	26	70

All conjugation reactions were performed at molar ratio of [EDC]:[NHS]:[DMAP]:[CPT-Gly] = 4:4:1:1. <sup>†</sup>Performed on linear PGA<sub>90</sub>.