Electronic Supplementary Information

Encapsulation in cooling-induced coacervates augments DNA enzyme activity

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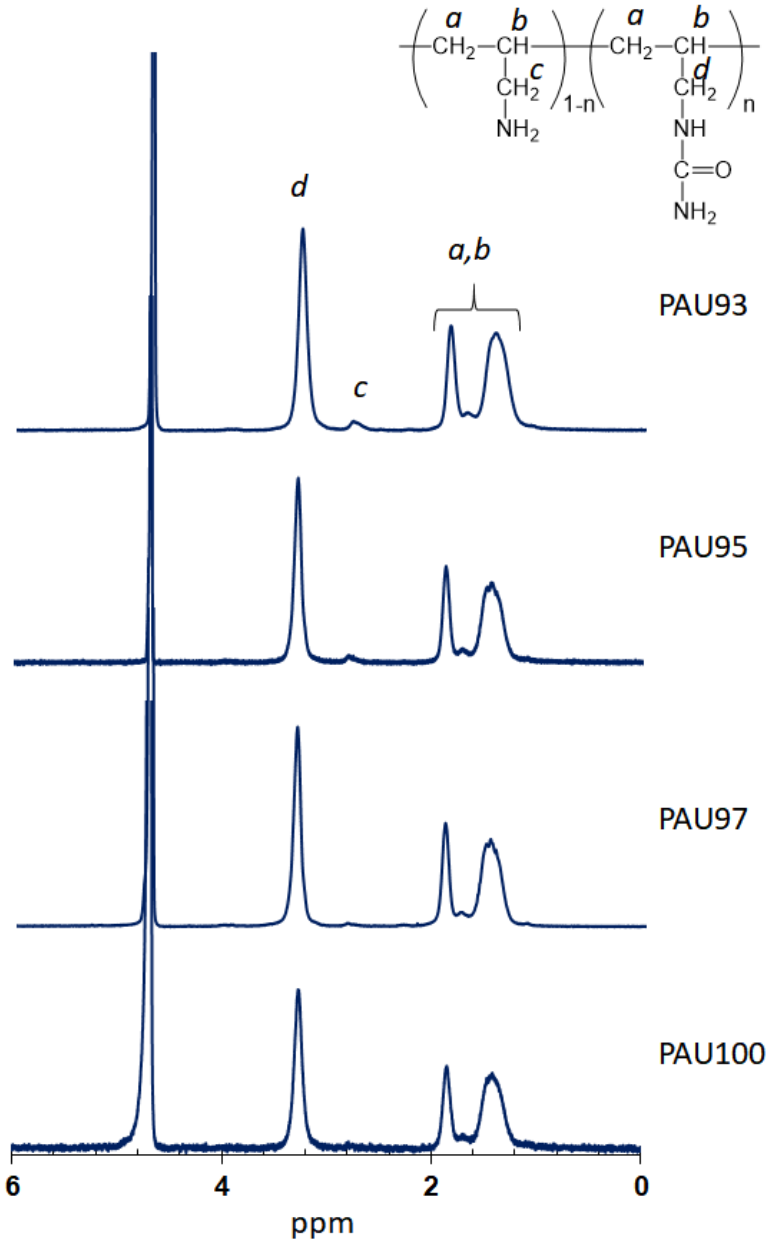

Fig. S1 ^{1}H NMR spectra of PAUs used in this study.

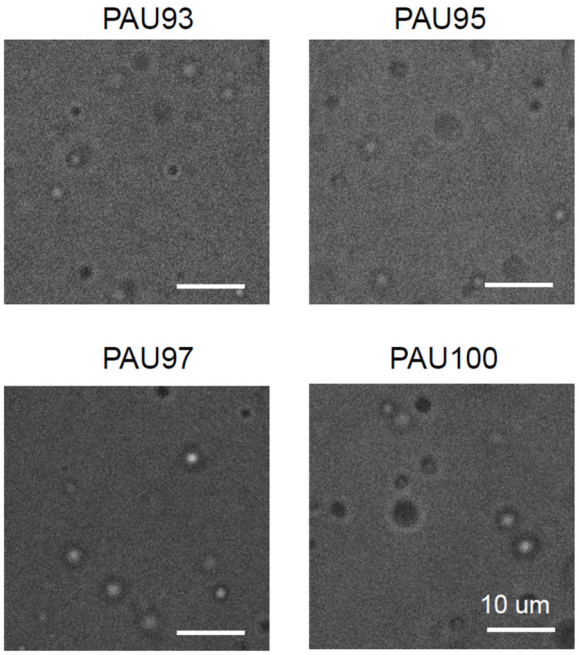

Fig. S2 Microscopic images of 1 mg/mL PAUs in the presence of 2 nM DNAzyme and 100 nM substrate at 35 ºC. Scale bars indicate 10 µm.

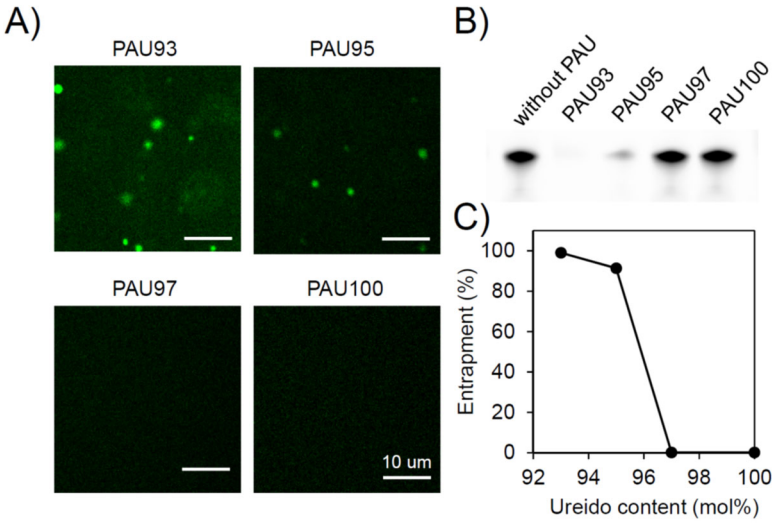

Fig. S3 (A) Microscopic images of 100 nM FITC-labeled substrate in the presence of 1 mg/mL PAUs at 35 ºC. Scale bars indicate 10 µm. (B) PAGE analysis of supernatants prepared from FITC-labeled substrate alone or in the presence of PAUs. (C) Percent entrapped substrate as a function of ureido content of PAU.

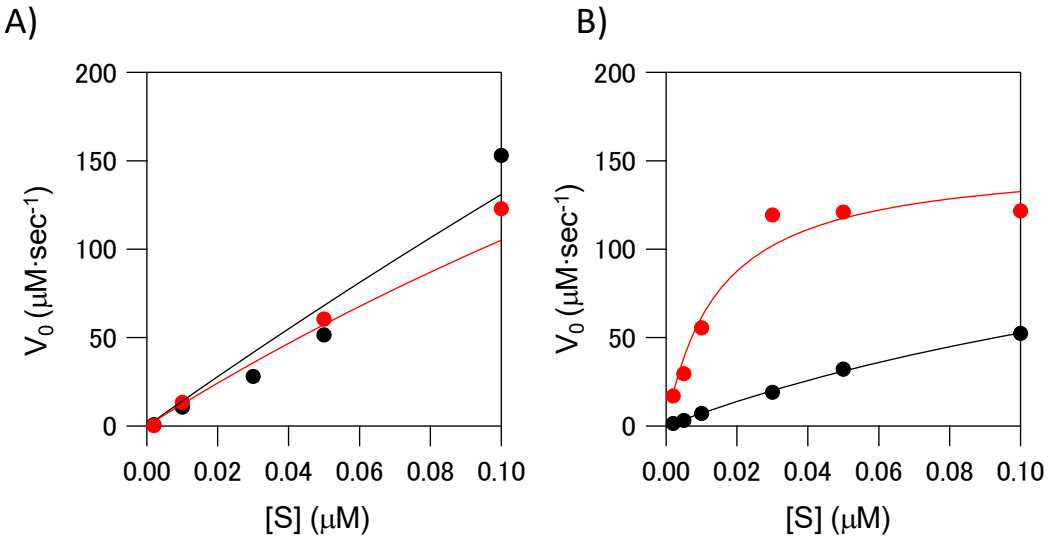

Fig. S4 Plots of velocity of DNAzyme reaction as a function of concentration of substrate in the absence (black lines) or the presence (red lines) of PAU93 at A) 55 ºC and B) 35 ºC.