Supplementary Information

Cationic copolymer enhances 8-17 DNAzyme and MNAzyme activities

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**Figure S1** N/P ratio dependence of 8-17 MNAzyme multiple-turnover reactivity, $k_{\text{obs}}$, with miR-21 target. Experimental condition: 35 °C, pH 7.3, in the presence of 0.2 mM Pb$^{2+}$. 
Figure S2 8-17 MNAzyme multiple-turnover reactions with 29-nt-long DNA target at pH 7.3. (A) Temperature dependence of $k_{\text{obs}}$, estimated in 10 mM Mg$^{2+}$ in the absence (dotted line) and presence (N/P=2) (solid line) of PLL-g-Dex. (B) Percent cleavage of substrate at the optimal temperature in the absence (dotted line) and presence (N/P=2) (solid line) of PLL-g-Dex with 10 mM Mg$^{2+}$. 