

Supplemental Information

Intrinsic Dynamics of DNA-Polymer Complexes: a Mechanism for DNA Release

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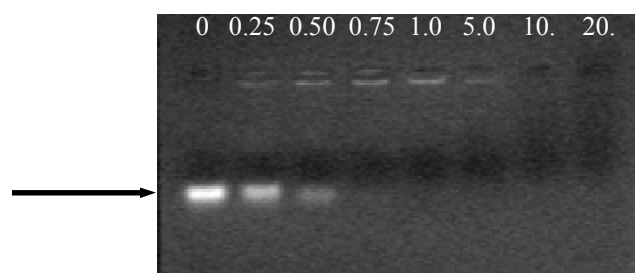


Figure S1. Agarose gel electrophoresis of 20-mer DNA at increasing +/- ratios of G5-NH₂. Free DNA is indicated by the band marked with the arrow. Loss of migration of DNA in the lane indicates complexation with dendrimer.

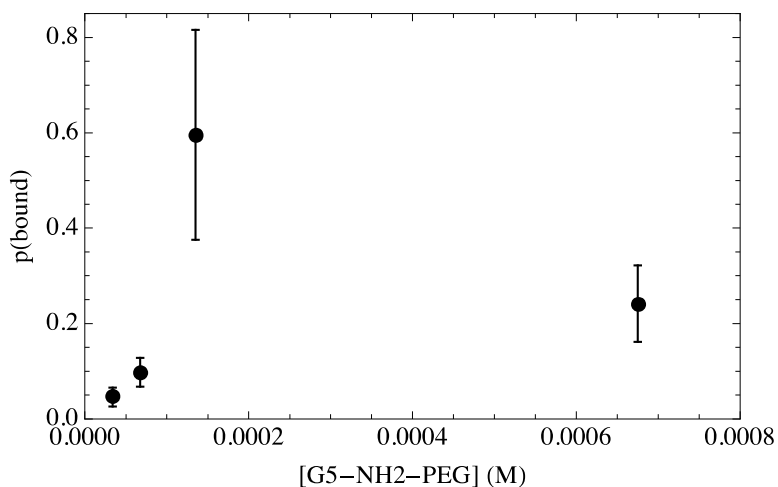


Figure S2. Fraction of bound DNA (p_{bound}) as a function of dendrimer concentration, as determined by global fitting of the relaxation data (See **Table 2**; $p_{\text{bound}} = 1 - p_{\text{free}}$)

Table S1. Observed R_2 values and amplitudes (Amp) from biexponential fitting of the decay of integrated DNA aromatic H2/H6/H8 (6.8-8.8 ppm) and ribose H1'/aromatic H5 (5.2-6.5 ppm) region versus delay time for increasing +/- ratios.

+/- Ratio	$R_{2,obs1}$ (Hz) (slow)	Amp 1	$R_{2,obs2}$ (Hz) (fast)	Amp 2
<i>Aromatic (H2, H6, H8)</i>				
0	3.40 ± 1.79	0.41 ± 0.19	14.5 ± 2.6	0.59 ± 0.19
0.25	9.14 ± 2.11	0.50 ± 0.08	55.3 ± 7.5	0.54 ± 0.08
0.50	18.5 ± 8.6	0.57 ± 0.22	93.5 ± 32.3	0.50 ± 0.20
1.0	32.3 ± 65.2	0.33 ± 0.37	291.8 ± 156.6	0.95 ± 0.31
5.0	0.0	0.58 ± 0.09	192.8 ± 94.8	0.69 ± 0.11
<i>Ribose (H1' and H5)</i>				
0	7.50 ± 0.28	0.85 ± 0.02	81.5 ± 19.6	0.16 ± 0.02
0.25	0.0	0.08 ± 0.04	25.3 ± 2.4	0.97 ± 0.03
0.50	0.0	0.07 ± 0.04	39.1 ± 3.4	0.95 ± 0.04
1.0	81.1 ± 136.2	0.50 ± 0.14	474.3 ± 136.2	0.75 ± 0.11
5.0	0.0	0.24 ± 0.02	192.0 ± 12.2	0.89 ± 0.02