TABLE 2 Summary of DNA elastic characteristics

Buffer composition	L_P (nm) mean ± SE (n)	K_o (pN) mean ± SE (n)	L_o (nm) mean ± SE (n)	L_o expected (nm)
10 mM Na^+ ($NaHPO_4$ buffer, pH 7.0)	47.4 ± 1.0 (14)	1008 ± 38 (10)	1343 ± 5 (10)	1328
150 mM Na^+, 5 mM Mg^{2+} ($NaHPO_4$ buffer, pH 7.0)	43.1 ± 1.3 (5)	1205 ± 87 (5)	1348 ± 6 (5)	1328
10 mM Na^+, 100 μM spermidine ($NaHPO_4$ buffer, pH 7.0)	38.7 ± 1.0 (8)	1202 ± 83 (5)	1313 ± 2 (5)	1328
20 mM Tris, 130 mM K^+, 4 mM Mg^{2+} (PTC buffer, pH 8.0)	41.0 ± 0.8 (15)	1277 ± 57 (12)	1352 ± 3 (12)	1328
20 mM Tris, 130 mM K^+, 4 mM Mg^{2+} (PTC buffer, pH 8.0)	42.1 ± 2.4 (4)	1010 ± 99 (5)	674 ± 5 (5)	661

L_P values were derived from fits to the Marko-Siggia formula for $0 < F < 5$ pN; K_o and L_o values were derived from fits to the Odijk formula for $2 < F < \sim 25$–50 pN. Parameter values returned by either method produced almost identical values for L_P and L_o. The expected value for L_o was computed from the number of base pairs in the DNA tether, assuming 0.338 nm/bp (Saenger, 1988), plus an allowance of ~15 nm to account for linkages at either end of the DNA tether. Na-phosphate buffers also contained 0.1 mM EDTA. PTC buffer (not all ingredients listed) was used in the assays of Yin et al. (1995).

Saenger, W. 1988. Principles of Nucleic Acid Structure. Springer-Verlag, New York.

Yin, H., M. D. Wang, K. Svoboda, R. Landick, S. M. Block, and J. Gelles. 1995. Transcription against an applied force. *Science.* 270:1653–1657.