Table S1. DNA sequences used to position nucleosomes, related to Figure 1

The 601 nucleosome positioning sequence (Lowary and Widom, 1998) shown in blue is used to position the histone octamer such that the linker DNA on the entry side is 78 bp long and that the linker on the exit side has varying lengths of n = 3 bp or -3 bp. In the case of n = -3 bp, the first 3 base pairs are omitted from the 601 sequence on the exit side. For the other nucleosome ruler constructs used to calibrate FRET as a function of the exit linker length as shown in Figure S1D, the DNA sequences are GCC-X (n = 6 bp), CGGCC-X (n = 8 bp), CGCGGCC-X (n = 10 bp), ACGCGGCC-X (n = 11 bp), ATACGCGGCC-X (n = 13 bp), and ACCCTATACGCGGCC-X (n = 18 bp) where 'X' denotes the DNA sequence of the n = 3 bp construct. The italicized letters indicate nucleotides originally included in the 601 positioning sequence (Lowary and Widom, 1998) and subsequently found to be outside the nucleosome core particle based on recent crystal structures (Chua et al., 2012; Makde et al., 2010; Vasudevan et al., 2010).

Exit linker length *n* (bp)	Sequence
***n* = 3**	GCCCTGGAGAATCCCGGTCTGCAGGCCGCTCAATTGGTCGTAGACAGCT CTAGCACCGCTTAAACGCACGTACGCGCTGTCCCCCGCGTTTTAACCGC CAAGGGGATTACTCCCTAGTCTCCAGGCACGTGTCAGATATATACATCCT G*T*GCATGTATTGAACAGCGACCTTGCCGGTGCCAGTCGGATAGTGTTCC GAGCTCCCACTCTAGAGGATCCCCGGGTACC
***n* = -3**	GAGAATCCCGGTCTGCAGGCCGCTCAATTGGTCGTAGACAGCTCTAGCA CCGCTTAAACGCACGTACGCGCTGTCCCCCGCGTTTTAACCGCCAAGGG GATTACTCCCTAGTCTCCAGGCACGTGTCAGATATATACATCCTG*T*GCAT GTATTGAACAGCGACCTTGCCGGTGCCAGTCGGATAGTGTTCCGAGCTC CCACTCTAGAGGATCCCCGGGTACC