

**SUPPLEMENTARY TABLE 5**

**Single-exponential fit parameters of life-time distribution from force-clamp data in Fig. 3e-g and S10 Fig.**

Protein	DNA	20pN	30pN	40pN
H3	Random	77±6.1	32±2.9	14±2.1
H3	Centromeric	30±4.8	19±3.5	14±3.6
CA	Random	31±18	25±2.7	22±6.4
CA	Centromeric	41±6.1	35±2.9	8±3.0

\* Error bars are standard deviation of the population distribution.