

SUPPLEMENTARY TABLE 2**Multi-Gaussian fit parameters of rupture force distribution from force-ramp data in Fig. 2g and 2h**

Protein	DNA	Peak1 (pN)	Peak2 (pN)
H3	Random	15±2.3	29±5.4
H3	Centromeric	7.8±2.8	28±6.2
CA	Random	13±0.5	25±4.6
CA	Centromeric	13±4.4	27±3.2

* Error bars are standard deviation of the population distribution.