

Supplementary Information: Gelation of the genome by topoisomerase II targeting anticancer agents

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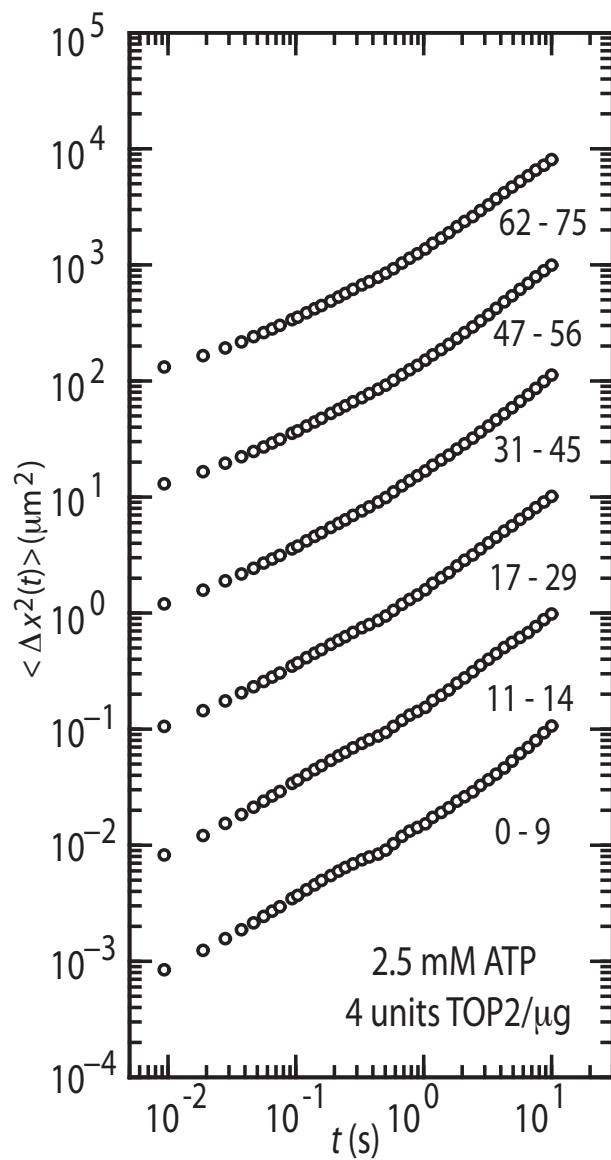


FIG. 1. Time evolution of the mean square displacement $\langle \Delta x^2(t) \rangle$ after the addition of TOP2 to a solution of 1.6 g of cosmid/L with 2.5 mM ATP (AMP-PNP-free). The TOP2 concentration is 4 units per μg of DNA. Time intervals are indicated in min. The data are shifted with a multiplicative factor 10 along the y -axis to avoid overlap.

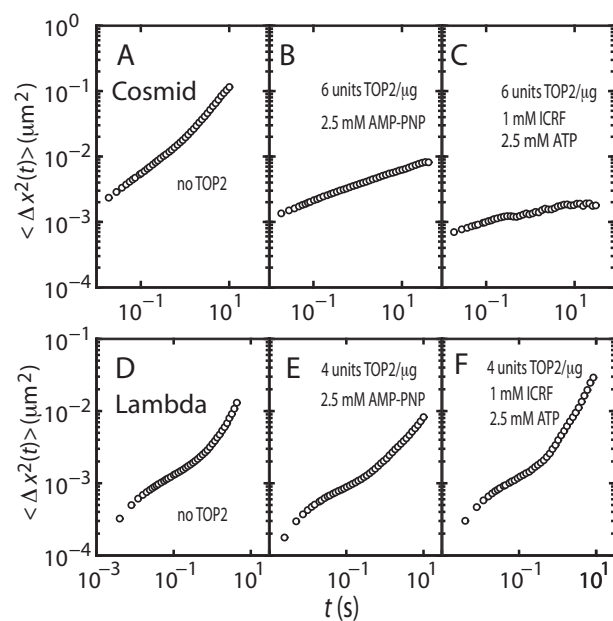


FIG. 2. (A-C) Mean square displacement $\langle \Delta x^2(t) \rangle$ for a solution of 1.6 g of cosmid/L. (A) No added TOP2; (B) 6 units of TOP2/ μg and 2.5 mM AMP-PNP; (C) 6 units of TOP2/ μg , 2.5 mM ATP, and 1 mM ICRF. (D-F) As in panels (A-C), but for 1.0 g of λ -DNA/L. (D) No added TOP2; (E) 4 units of TOP2/ μg and 2.5 mM AMP-PNP; (F) 4 units of TOP2/ μg , 2.5 mM ATP, and 1 mM ICRF. The samples are incubated at 310 K for an 1 h after addition of TOP2.