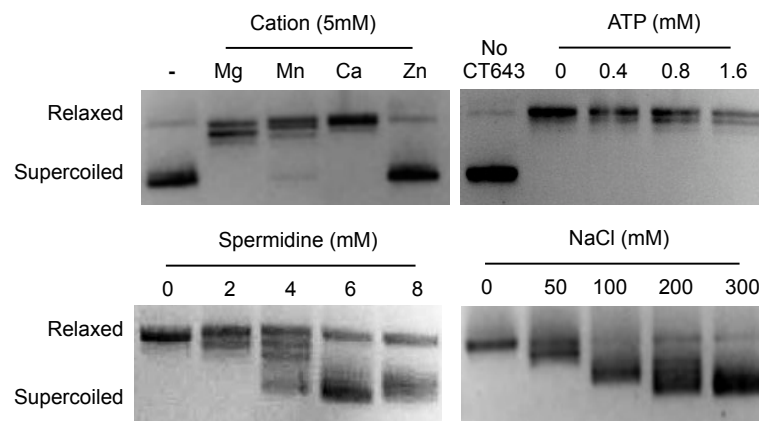
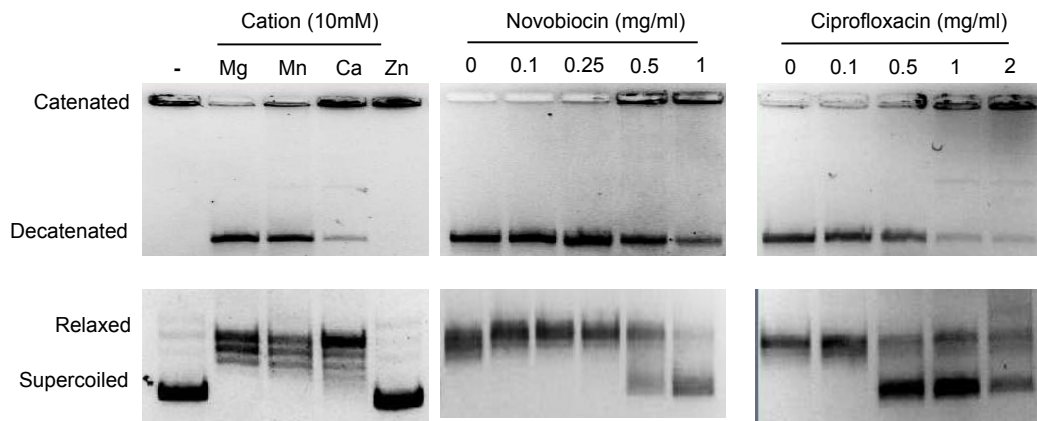


**Figure S1: Effects of cations and inhibitors on *C. trachomatis* DNA gyrase activity.**



**Figure S2: Effects of cations, ATP, spermidine and NaCl on *C. trachomatis* DNA topoisomerase I activity.**



**Figure S3: Effects of cations and inhibitors on *C. trachomatis* DNA topoisomerase IV activities.**

1 **Supplementary figure legends**

2 **Figure S1: Effect of cations and inhibitors on DNA gyrase activity.** 100 ng GyrA and 50  
3 ng GyrB were tested in the presence of 5 mM of each divalent cation. The effect of a range of  
4 concentrations of novobiocin or ciprofloxacin was tested with  $Mg^{2+}$  in the reaction mixture.  
5 The reaction products were visualized on a 1% agarose gel.

6

7 **Figure S2: Effect of cations, ATP, NaCl, spermidine and nalidixic acid on DNA**  
8 **topoisomerase I activity.** The effect of divalent cations was assayed by adding 5 mM of each  
9 cation to the reaction mixture. The effect of ATP, NaCl, spermidine or nalidixic acid, over a  
10 range of concentrations, was tested in a reaction mixture containing  $Ca^{2+}$ . For each reaction,  
11 500 ng of TopA was used and the reaction products were visualized on a 1% agarose gel.

12

13 **Figure S3: Effect of cations and inhibitors on DNA topoisomerase IV activities.** Effects  
14 of divalent cations was assayed by adding 10mM of each cation to the decatenation or  
15 relaxation reaction mixture. Various concentrations of novobiocin or ciprofloxacin were  
16 added to the decatenation or relaxation reaction mixture containing  $Mg^{2+}$ . For each assay,  
17 75ng each of CT660 (ParC) and CT661 (ParE) were used, and the reaction products were  
18 visualized on a 1% agarose gel.

19