



[a] 1 - 1.5 kb DNA (blunt), 0 mM NaCl, Mg²⁺
 2 - 1.5 kb DNA (blunt), 0 mM NaCl, Mg²⁺, NrnC wt
 3 - 1.5 kb DNA (blunt), 0 mM NaCl, Mg²⁺, NrnC D²⁵A
 4 - 1.5 kb DNA (blunt), 0 mM NaCl, Mn²⁺
 5 - 1.5 kb DNA (blunt), 0 mM NaCl, Mn²⁺, NrnC wt
 6 - 1.5 kb DNA (blunt), 0 mM NaCl, Mn²⁺, NrnC D²⁵A
 7 - 1.5 kb DNA (blunt), 100 mM NaCl, Mg²⁺
 8 - 1.5 kb DNA (blunt), 100 mM NaCl, Mg²⁺, NrnC wt
 9 - 1.5 kb DNA (blunt), 100 mM NaCl, Mg²⁺, NrnC D²⁵A
 10 - 1.5 kb DNA (blunt), 100 mM NaCl, Mn²⁺, NrnC
 11 - 1.5 kb DNA (blunt), 100 mM NaCl, Mn²⁺, NrnC wt
 12 - 1.5 kb DNA (blunt), 100 mM NaCl, Mn²⁺, NrnC D²⁵A

[b] 1 - 1.5 kb DNA (blunt), 0 mM NaCl, Mn²⁺
 2 - 1.5 kb DNA (blunt), 0 mM NaCl, Mn²⁺, NrnC wt
 3 - 1.5 kb DNA (blunt), 10 mM NaCl, Mn²⁺, NrnC wt
 4 - 1.5 kb DNA (blunt), 20 mM NaCl, Mn²⁺, NrnC wt
 5 - 1.5 kb DNA (blunt), 30 mM NaCl, Mn²⁺, NrnC wt
 6 - 1.5 kb DNA (blunt), 40 mM NaCl, Mn²⁺, NrnC wt
 7 - 1.5 kb DNA (blunt), 50 mM NaCl, Mn²⁺, NrnC wt
 8 - 1.5 kb DNA (blunt), 60 mM NaCl, Mn²⁺, NrnC wt
 9 - 1.5 kb DNA (blunt), 70 mM NaCl, Mn²⁺, NrnC wt
 10 - 1.5 kb DNA (blunt), 80 mM NaCl, Mn²⁺, NrnC wt
 11 - 1.5 kb DNA (blunt), 90 mM NaCl, Mn²⁺, NrnC wt
 12 - 1.5 kb DNA (blunt), 100 mM NaCl, Mn²⁺, NrnC wt

[c-f] 1 - 1.5 kb DNA, no 5' phosphate, 0 mM NaCl
 2 - 1.5 kb DNA, 5' phosphate, 0 mM NaCl
 3 - 1.5 kb DNA, no 5' phosphate, 0 mM NaCl, Mg²⁺, NrnC
 4 - 1.5 kb DNA, 5' phosphate, 0 mM NaCl, Mg²⁺, NrnC
 5 - 1.5 kb DNA, no 5' phosphate, 0 mM NaCl, Mn²⁺, NrnC
 6 - 1.5 kb DNA, 5' phosphate, 0 mM NaCl, Mn²⁺, NrnC
 7 - 1.5 kb DNA, no 5' phosphate, 0 mM NaCl, Mg²⁺, NrnC
 8 - 1.5 kb DNA, 5' phosphate, 0 mM NaCl, Mg²⁺, NrnC
 9 - 1.5 kb DNA, no 5' phosphate, 0 mM NaCl, Mn²⁺, NrnC
 10 - 1.5 kb DNA, 5' phosphate, 0 mM NaCl, Mn²⁺, NrnC

[c]: blunt DNA

[d]: NdeI-treated DNA

[e]: NotI-treated DNA

[f]: KpnI-treated DNA

Figure 5 - figure supplement 2 - source data 4