



Figure S1

Legend: Supplementary Figure S1

Archaeal nucleosomes assembled by HTkA and HTkB, in vivo and in vitro, contain 5 bp offset helical repeats of AA/AT/TA/TT and CC/GG/GC/CG dinucleotides and preferentially exclude oligoA/T-rich sequences. The frequencies of occurrence of AA/AT/TA/TT and CC/GG/GC/CG dinucleotides, at each position relative to the center of an archaeal nucleosome assembled on *T. kodakarensis* genomic DNA by **(a)** HTkA in vivo and in vitro, and **(c)** by HTkB in vivo and in vitro. The ratios of the presence and absence of all pentamers protected from MN digestion by **(b)** HTkA nucleosome assembly in vivo and in vitro, and **(d)** by HTkB nucleosome assembly in vivo and in vitro. As noted, pentamers that contained only G and/or C were incorporated preferentially by both HTkA and HTkB into archaeal nucleosomes in vivo and in vitro (blue regions), whereas pentamers that contained only A and/or T (red regions) were preferentially excluded from nucleosome assembly both in vivo and in vitro.