

Supporting Information

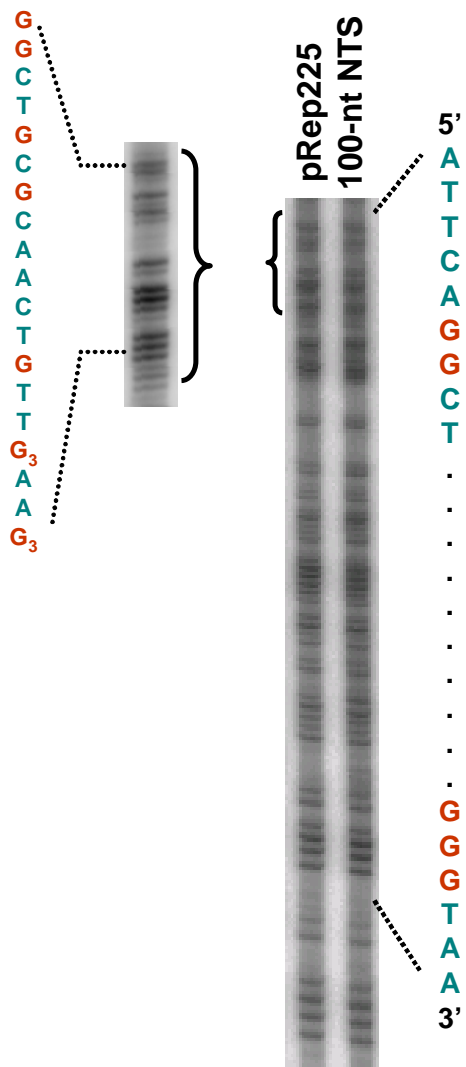
Structural Aspects of RecA-dependent Homologous Strand Exchange

Involving Human Telomeric DNA

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Figure S1: DMS-sensitivity assays of RecA-mediated synaptic complexes formed on non-telomeric sequences. (A) Autoradiogram of a 8% polyacrylamide sequencing gel showing the results of DMS sensitivity experiments carried out on the displaced G-rich strand of RecA synaptic complexes formed by the 100-nt non-telomeric single strand, 100-nt NTS. pRep225 was paired with 100-nt non-telomeric sequence, treated with DMS, and cleaved with piperidine (see Materials and Methods). Parallel application of samples to the gel took place after different detention times (the electrophoresis pattern shown in the inset corresponds to a lane that was run for 120 minutes longer than those in the main figure). 5'-end and 3'-end sequences of the region of homology are shown. (B) Relative DMS accessibility of guanine residues spanning the repeat region plotted as a function of G-residue number. The intensity of each G-specific band was determined relative to that of a reference G position located outside the region of homology (see Materials and Methods). Guanine-specific cleavage signals for the non-telomeric synaptic complex and for complexes of RecA with plasmid pRep225 in the absence of the third strand are shown as a function of G-residue position. Representative error bars, indicating one standard deviation, are shown in cases for which three or more replicate values were available. The region of homology is indicated by the shaded region.

A.



B.

