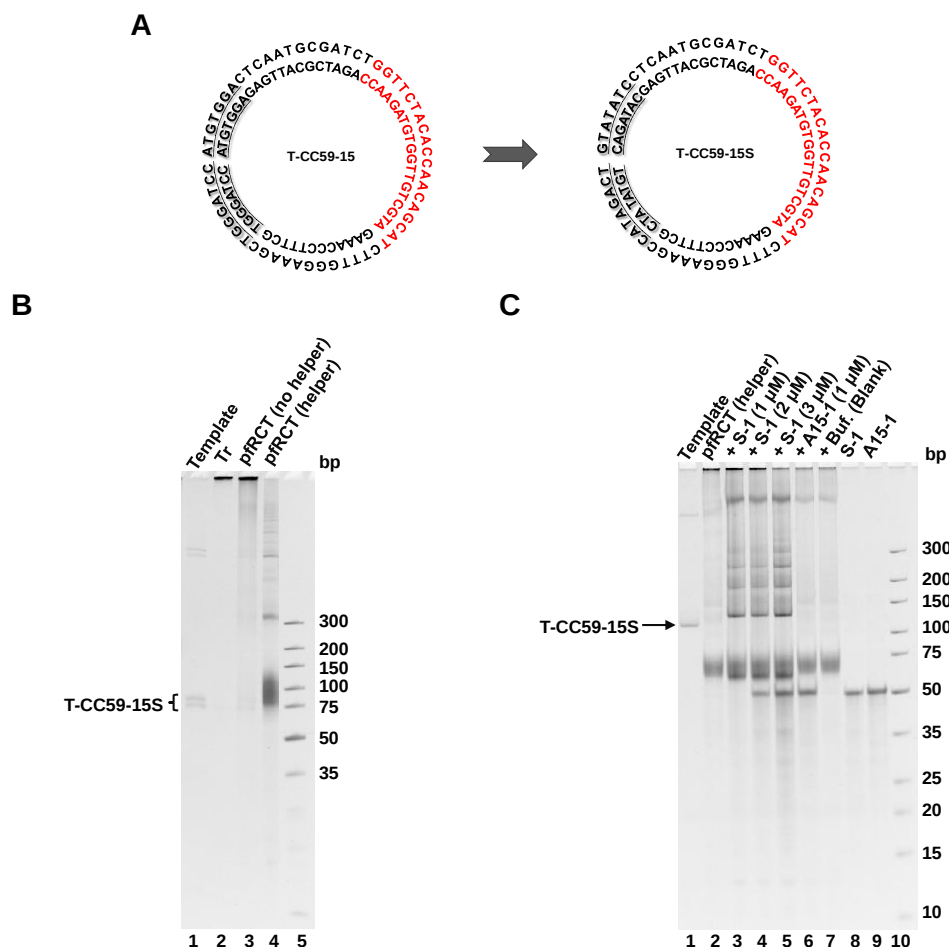


Supplemental_figure_S10



pfRCT in the presence of Helper DNA for small-sized dsDNA template containing a bubble with palindromic sequence. A) Sequences of 59-bp dsDNA templates with a bubble of 15 bp with full mismatch sequence (T-CC59-15) or mismatched palindromic sequence (T-CC59-15S). B) Transcription results using T-CC59-15S as template (8% dPAGE). Lane 1: T-CC59-15S; Lane 2: RCT product; Lane 3: pfRCT product without Helper; Lane 4: pfRCT product with 1 μ M Helper (Helper-15). Other conditions: [Template] = 50 nM, [NTP]_{each} = 2 mM. C) Hybridization results (10% PAGE). Lane 1: T-CC59-15S; Lane 2: pfRCT product with Helper; Lanes 3–7: hybridization results of RNA product with 59-nt single-stranded DNA ("S-1" refers to short ssDNA with sense sequence; "A15-1" refers to short ssDNA with antisense sequence). The concentrations of "S-1" in lanes 3–5 were 1, 2 and 3 μ M, respectively. Exact conditions are listed in Methods; Lanes 8–10: size markers.