

Increasing Overhang GC-Content Improves Efficiency of Sticky-End Ligations, Which Can be Quantified by qPCR

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SUPPLEMENTAL MATERIAL

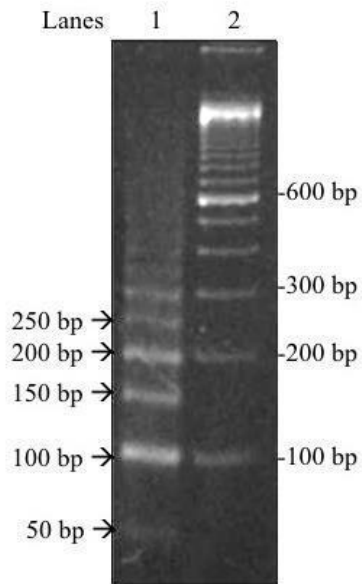


FIG S1 Gel electrophoresis of ligated oligonucleotides on a 2% Agarose Gel. Gel was run in 1x TBE at 120V for 1 hour at room temperature. Lane 1 contains ligation of control oligonucleotides. Lane 2 contains 100 bp DNA Ladder.

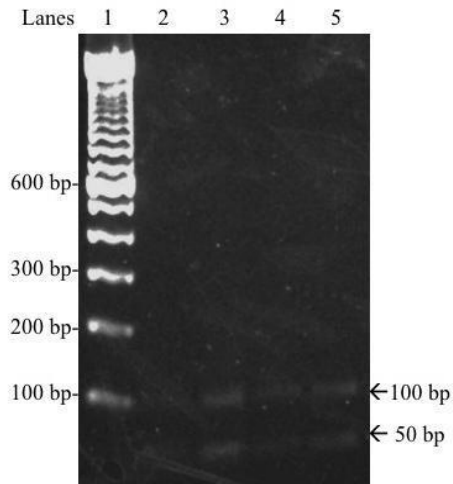


FIG S2 Gel electrophoresis of self-ligated oligonucleotides on a 2% agarose gel, confirming blunt-end ligations. Gel was run in 1x TBE at 120V for 1 hour at room temperature. Lane 1 contains 100bp DNA Ladder. Lanes 2 and 3 contains self-ligation of control oligonucleotide. Lanes 4 and 5 contains self-ligation of control oligonucleotides. Self-ligation indicates the presence of only one oligonucleotide in the ligation reaction.

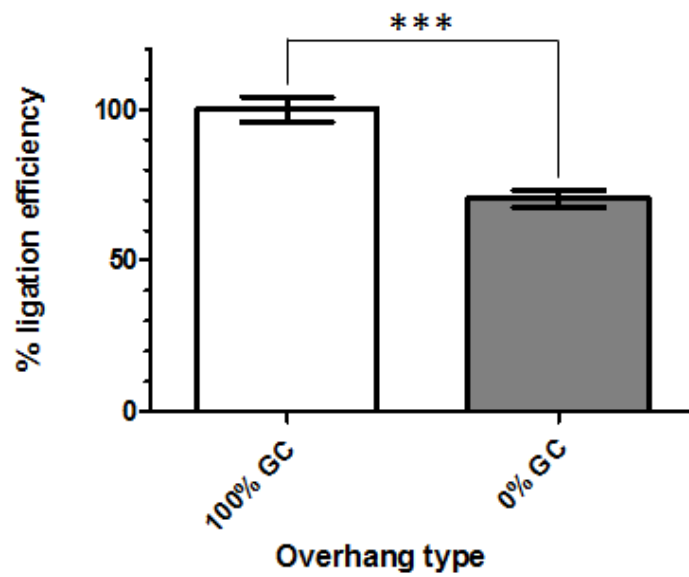


FIG S3 Ligation efficiency of 5-minute 100-, and 0-GCs. Relative efficiencies were determined using equation of the line ($y = -4.714 \log_2(x) + 14.82$) generated from the standard curve (Fig. 4), expressed as a percentage of the 100-GC ligation. Unpaired, two-tailed Student's *t*-test was used for statistical analysis ($p < 0.001$).