



Complete the circle with LoopLigase[®]

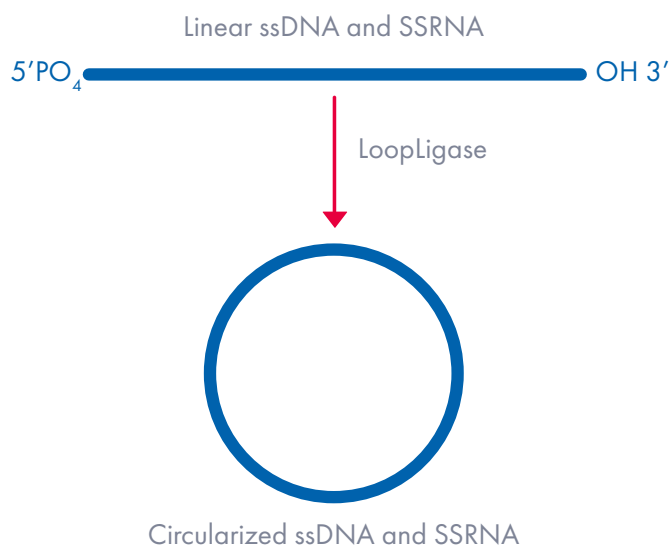
High-efficiency and low-bias ssDNA and ssRNA circularization

LoopLigase (cat. no. L6130L) facilitates efficient intramolecular ligation (circularization) of both ssDNA and ssRNA that have 5'-PO₄ and 3'-OH ends. It is a thermostable, ATP-dependent enzyme for direct ligation without relying on adjacent complementary regions.

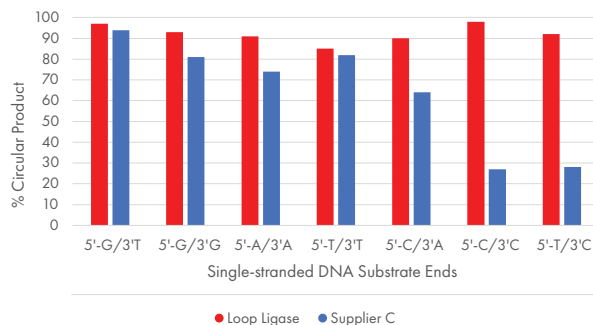
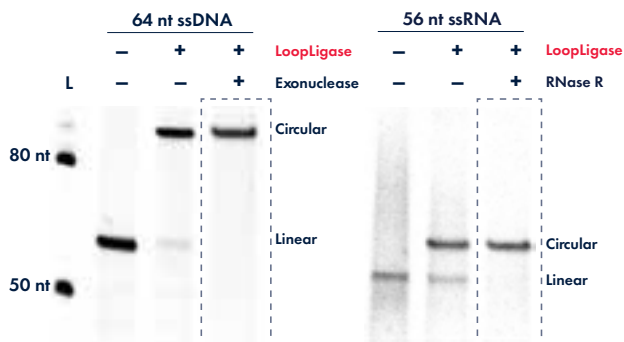
LoopLigase is applicable for use in rolling circle amplification (RCA) workflows and preparation of circular libraries for NGS.

Advantages of LoopLigase:

- Faster reaction rate
- Minimal template bias
- Circularizes longer substrates
- Does not require splint oligonucleotides
- Does not generate concatemers



LoopLigase enables high-efficiency, low-bias circularization of ssDNA and ssRNA

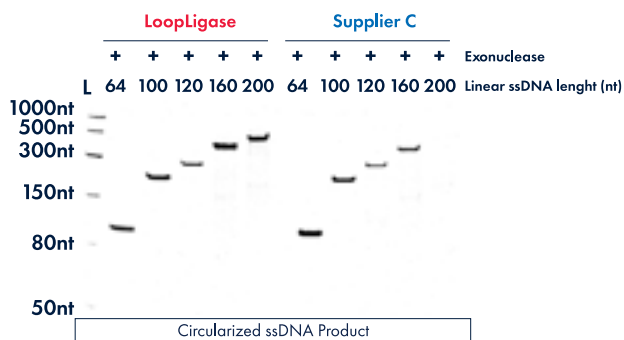


Exceptionally efficient intramolecular ligation

LoopLigase shows high-efficiency circularization of both ssDNA and ssRNA. Unligated ssDNA and ssRNA were digested by exonuclease and RNase R, respectively.

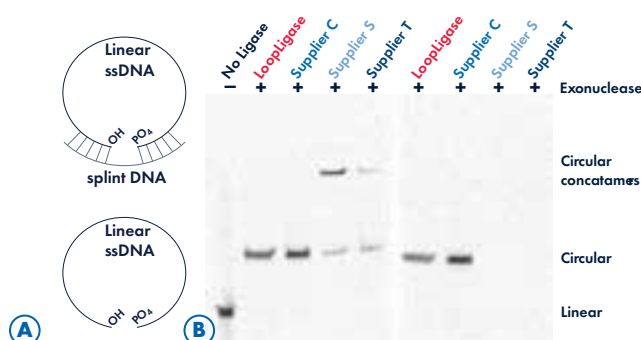
Minimal bias for terminal nucleotides

LoopLigase circularized all substrates to nearly completion, as compared with Supplier C, which showed preference and bias against other substrates, particularly those containing terminal cytosine bases (5' to 3').



Efficiently circularizes longer substrates

LoopLigase efficiently circularizes longer substrates with the same terminal nucleotides, in contrast to Supplier C. Unligated substrates were then digested with exonuclease.



No splint oligonucleotide required and no concatemers generated

A. LoopLigase does not require a splint oligonucleotide to successfully circularize DNA. **B.** LoopLigase also generates low to no circular concatemers.

Ordering Information

Product	Contents	Cat. no.
LoopLigase	50 U of LoopLigase at 2,000 U/mL.	L6130L



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