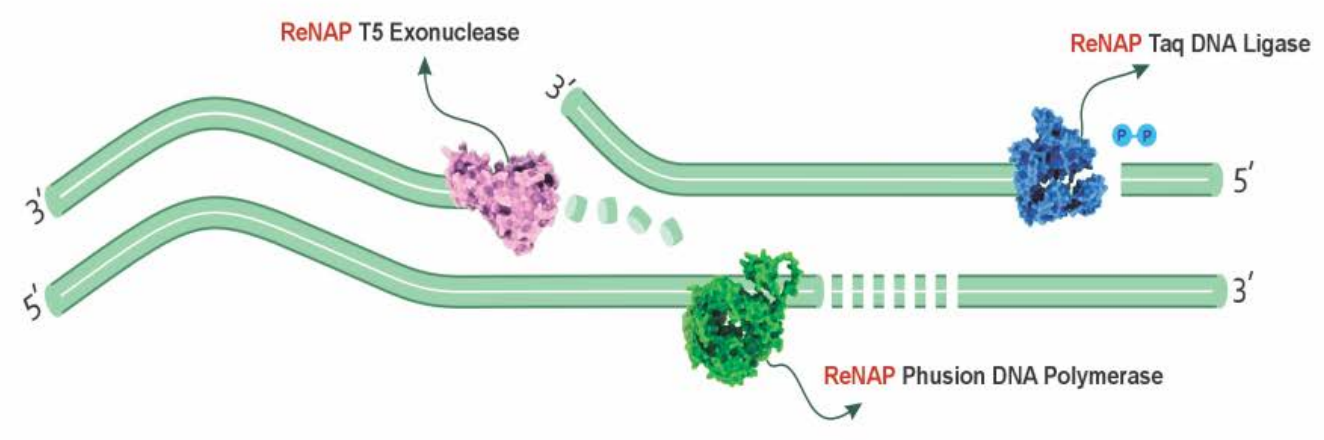
ReNAP BIOTECH

ReNAP's Magic Cloning Kit (2x)



The ReNAP's Magic Cloning Kit is a rapid and accurate cloning kit based on the Gibson cloning procedure*. ReNAP Biotech develops this kit and includes three key enzymes: 1) ReNAP Phusion Polymerase (RE009), 2) ReNAP T5 Exonuclease (RE010), and 3) ReNAP Taq DNA Ligase (RE011). Simple reaction-mix preparation and short incubation time (15-60 min) at a single temperature (50°C), in a heat block or thermal cycler, are the benefits of this kit.

- *Gibson, D.G. et.al. (2009). Nature Methods. 343-345.

Performing a successful molecular cloning experiment only requires the design of overlapping ends in DNA fragments (25-50 bp in length), and mixing the correct amounts of each DNA fragment proportional to its length. A careful experimental design and reaction preparation most often guarantee ~100% success rate in the correct assembly of multiple DNA fragments, even with the most challenging molecular cloning experiments.

	Insertion in vector	2-3 Fragment Assembly	4-6 Fragment Assembly
Total Amount of Fragments	50-100 ng vector + 2-3 fold molar excess of eachinsert**	0.02-0.5 pmols	0.2-1 pmols
Magic Cloning Master Mix (2x)	10 µl	10 µl	10 µl
Deionized H20	variable	variable	variable
Total Volume	20 µl	20 µl	20 µl

- Incubate samples at 50°C, for up to 60 minutes.
- Store samples at -20°C and prepare them for transformation.
- **Use 5-fold molar excess of any insert(s) less than 200 bp.