

TA Cloning Kit

Rapid and Economical Cloning

Description

RBC T&A cloning system is ideal for cloning PCR products generated using thermostable DNA polymerases which add a single terminal 3'-dA nucleotide overhang (Taq). It is extremely economical and convenient for rapid cloning. Following ligation, the mixture may be used directly to transform HIT Competent Cells™ or other competent cells or purified to achieve a higher efficiency of or other competent cells or purified to achieve a higher efficiency of transformation. The vector is highly purified to reduce background cloning.

Applications

ACCEPTS TERMINAL 3'-dA nucleotide overhang PCR products.

Transform ligation product (purified/unpurified) into HIT Competent Cells™.

LacZ complementation for blue/white screening.

Ampicillin marker for antibiotic selection.

Universal primer for easy transformation screening.

Ligation Conditions

	User Sample	Positive Control
Ligation Buffer A	1 µl	1 µl
Ligation Buffer B	1 µl	1 µl
TA cloning vector	2 µl	2 µl
PCR product	X µl	****
T4 DNA Ligase	1 µl	1 µl
Control DNA	****	3 µl

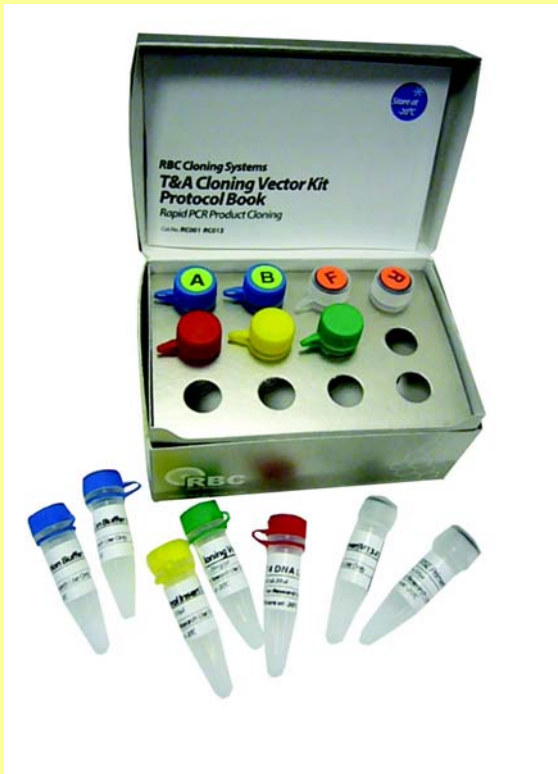
Add deionized water to a final volume of 10 µl. Incubate the reactions for 5 to 15 mins at 22°C

Storage Conditions

T&A Cloning Kit should be stored immediately upon receipt at -20°C in a constant temperature freezer. T&A Cloning Kit can be stored for up to 12 months without showing any deduction in performance and quality with proper storage.

Note: T&A is a rapid high quality cloning system-Following are comparison results from RBC Labs.

1. TA cloning system is very efficient at LIGATION with higher resulting transformation efficiency compared to company P's transformation system. T&A cloning system provides two types of ligation buffer for your convenience.
2. T&A cloning system high efficiency ligation takes only 20 minutes versus 1 hour to overnight for company P's system.
3. TA cloning system resulted in higher ACCURACY compared to company P's in colony PCR pickings.
4. TA cloning system shows very good efficiency of cloning up to 5 kb INSERTS, while company P's system may show slightly higher efficiency > 5kb.



Cat. No. RC001 (20 reactions)
TA Cloning Vector (25 ng/µl): 40 µl
Control Insert DNA (10 ng/µl): 10 µl
T4 DNA Ligase (3 U/µl): 20 µl
T4 DNA Ligation Buffer A: 100 µl
T4 DNA Ligation Buffer B: 100 µl
Forward Primer(M13-F) (10 µM): 50 µl
Forward Primer(M13-R) (10 µM): 50 µl