

T4 DNA Quick Ligation Kit

Product specification

Product content	Catalog Number	Specification
T4 DNA Ligase	CL06020	20 T
2×Quick Buffer		
T4 DNA Ligase	CL06050	50 T
2×Quick Buffer		
T4 DNA Ligase	CL06100	100 T
2×Quick Buffer		

Product introduction

T₄ DNA ligase is often used to catalyze the ligation of double-stranded DNA ends or complementary cohesive ends, and also catalyzes the linkage between the double-stranded RNA 5'-phosphate terminal and the 3'-hydroxyl terminus. It is also possible to repair single strand breaks in double stranded DNA, RNA, or the single strand breaks in DNA/RNA hybrid double strands. All the above reactions are required to consume ATP.

Reaction system

Component	Volume (μL)
2×Quick Buffer	5.0
Vector DNA	A
Fragment DNA	B
Enzyme	0.5~1.0
ddH ₂ O	Up to 10 μL

Reaction conditions

- (1)Cohesive-ended connection:Reaction at 25℃ for 10~15 min;
- (2)Blunt-ended connection:Reaction at 25℃ for 30~40 min;
- (3)Cohesive-ended connection/Blunt-ended connection:Reaction at 25℃ for 120 min.

Notes

- (1)The mole ratio between the carrier DNA and the inserted fragment DNA is between 1:3~1:9;
- (2)2×Quick Buffer need to be fully mixed before using , avoid placing at room temperature for a long time ;
- (3)DNA concentration can be appropriately increased when carrying out Blunt-ended connection.
- (4) EDTA and other metal ion chelators have inhibitory effect on the amplification reaction of the enzyme, and it is necessary to ensure that no such chelating agent is included in the reaction system.
- (5)This product is limited to the scientific research of professional personnel and shall not be used for clinical diagnosis or treatment, and shall not be used for food or medicine.For your safety and health, please wear lab clothes and wear disposable gloves.