

# T4 DNA Ligase

| Catalog # | Pack size | Price(\$) |
|-----------|-----------|-----------|
| ZT00201   | 8000U     | 12.00     |
| ZT00202   | 40000U    | 50.00     |

## Description:

T4 DNA Ligase is a recombinant enzyme formulated and tested for high activity in blunt- and cohesive-end ligations for cloning and linker addition. The enzyme covalently joins 5'-phosphate and 3'-hydroxyl termini in duplex DNA or RNA. It is free of detectable exo- or endonuclease activities.

## Source:

Purified from recombinant *E. coli* strain.

## Applications:

Cloning of restriction fragments.  
Joining linkers and adapters to blunt-ended DNA.

## Unit Definition:

One unit is defined as the amount of enzyme required to give 50% ligation of Hind III fragments of lambda DNA (5' DNA termini concentration of 0.12 $\mu$ M, 300 $\mu$ g/ml) in a total reaction volume of 20 $\mu$ l in 30 minutes at 16 $^{\circ}$ C in 1X T4 DNA Ligase Reaction Buffer.

## Concentration:

400U/ $\mu$ l

## Quality Control Tests:

Activity, SDS-PAGE (purity), DNase, endonuclease/nickase, RNase.

## Storage:

T4 DNA ligase in 10 mM Tris-HCl, 50mM KCl, 1mM dithiothreitol, 0.1mM EDTA, 0.2mg/ml BSA, 50% glycerol, pH 7.4 (25 $^{\circ}$ C) should be stored at -20 $^{\circ}$ C.

