



## T4 DNA Ligase [5U/uL]

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T4 DNA Ligase is produced by E.coli carrying T4 bacteriophage gene 30. The enzyme catalyzes the formation of phosphodiester bonds between 5'-phosphate groups and 3'-hydroxyl groups of double-stranded DNA or RNA. It can repair single-strand nicks in double-stranded DNA, RNA, or DNA/RNA hybrids and can ligate DNA fragments with sticky or blunt ends. It is not active on single-stranded nucleic acids. The enzyme is primarily used for cloning of restriction endonuclease-digested DNA fragments, site-directed mutagenesis, cloning of PCR products, linear DNA circularization, and repair of double-stranded DNA nicks. T4 DNA Ligase (Fast) requires ATP as a cofactor and completes sticky end ligation reactions at room temperature in just 10 minutes.

Kit components:

1. T4 DNA Ligase [5U/ $\mu$ L]: 200 $\mu$ L (1kU)
2. 10x T4 DNA Ligase Buffer: 2 x 1mL
3. 50% PEG: 1mL

Catalog No.	514000
Size	1kU
Product Category	Cloning / Ligation
Storage/Stability	-20°C/1 year
Shipping	Gel Packs