

Tth DNA Ligase

CERTIFICATE OF ANALYSIS

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| #EN13 | Tth DNA Ligase |
| Quantity: | 25 U, 250 U, 2500 U |
| Components: | Tth DNA Ligase 10x Tth Ligation Buffer |
| Batch Number: | 646073 |
| Expiry Date: | 04.2021 |
| Store at: | -20°C |

Description: Tth DNA Ligase catalyzes the NAD-dependent formation of phosphodiester bonds between adjacent 3' hydroxyl and 5'-phosphate termini in double stranded DNA. It is isolated from *Escherichia coli* strain containing plasmid carrying the *Thermus thermophilus* DNA ligase gene. Tth DNA Ligase is stable and active at much higher temperatures than conventional DNA ligases optimum ligation temperature range is 7-10°C higher than that of T4 DNA ligase and is determined by the T_m of the substrates. High ligation temperature eliminate the nonspecific ligation.

QUALITY CONTROL

Tth DNA ligase activity is assayed in a reaction containing 1 µg of bacteriophage lambda DNA digested with *SalI* and *SmaI* (Control DNA), 1x Tth Ligation Buffer and varying amounts of enzyme for 100 minutes at 45°C. Results are assayed by agarose gel electrophoresis.

The product is free of unspecific DNA nucleases. Results are assayed by agarose gel electrophoresis following incubation of 1 µg of DNA substrate with 5 U of Tth ligase enzyme for 4 hours at 70°C

Quality authorized by: Justyna Leibner-Ciszak Date: 10.05.2018

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PRODUCT USE LIMITATION

This product of Blirt S.A. has been developed for research purposes only and it is not suitable for human and animal therapeutic or diagnostic use.

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