

Certificate of Analysis

T4 DNA Ligase | EV-MOL-010

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|-------------------|----------------------|------------------|----------------|
| Product Name | T4 DNA Ligase | Lot Number | EZV-L-2604-001 |
| Catalog Number | EV-MOL-010 | Manufacture Date | April 2026 |
| Size | 10,000 U / 100,000 U | Expiration Date | April 2028 |
| Storage Condition | -20°C | Release Date | April 2026 |

Product Specifications

| Test / Parameter | Specification | Lot Result | Status |
|-----------------------------------|--|---------------------------|--------|
| Appearance | Clear, colorless to faint yellow solution | Clear, colorless solution | PASS |
| Molecular Weight | ~55.3 kDa (SDS-PAGE) | 55.3 kDa | PASS |
| Purity (SDS-PAGE) | >95% (single band) | 97.2% | PASS |
| Concentration | 400 U/μL (10,000 U/25 μL) | 402 U/μL | PASS |
| Ligation Activity (Cohesive Ends) | >95% ligation of λ-HindIII DNA at 16°C, 30 min | 98.1% | PASS |
| Ligation Activity (Blunt Ends) | >80% ligation at 16°C, 16 h | 83.5% | PASS |
| Exonuclease Activity | No detectable activity (200 U, 4 h, 37°C) | None detected | PASS |
| Endonuclease Activity | No nicking of supercoiled pUC19 (200 U, 4 h) | None detected | PASS |
| RNase Activity | No degradation of 5 μg RNA (200 U, 2 h, 37°C) | None detected | PASS |
| pH (formulation buffer) | 7.3–7.6 | 7.4 | PASS |
| Sterility | No microbial growth (7-day incubation) | No growth | PASS |

Formulation Buffer

10 mM Tris-HCl (pH 7.4), 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 200 μg/mL BSA, 50% glycerol.

Unit Definition

One unit (U) is defined as the amount of T4 DNA Ligase required to give >95% ligation of 1 μg of HindIII-digested lambda DNA in 30 minutes at 16°C in a 20 μL reaction.

Quality Release Statement

This lot of T4 DNA Ligase (EV-MOL-010) has been tested according to the specifications listed above and meets all release criteria. This Certificate of Analysis is issued by Enzoverta Life Sciences LLC Quality Assurance department.

Quality Assurance Signature:

Date Issued: April 2026

QA Director, Enzoverta Life Sciences LLC

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