

Certificate of Analysis

T4 DNA Ligase | EV-MOL-010

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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