

Certificate of Analysis

T4 Polynucleotide Kinase (T4 PNK) | EV-MOL-003

Product Name	T4 Polynucleotide Kinase (T4 PNK)	Lot Number	EZV-K-2604-001
Catalog Number	EV-MOL-003	Manufacture Date	April 2026
Size	500 U / 2,500 U	Expiration Date	April 2028
Storage Condition	-20°C	Release Date	April 2026

Product Specifications

Test / Parameter	Specification	Lot Result	Status
Purity (SDS-PAGE)	>95% (single band at ~33 kDa monomer)	96.5%	PASS
Molecular Weight	~33 kDa monomer (SDS-PAGE)	33 kDa	PASS
Concentration	10 U/μL	10.3 U/μL	PASS
5'-Kinase Activity	≥90% γ - ³² P transfer to 5'-OH oligo (37°C, 30 min)	93.2%	PASS
3'-Phosphatase Activity	≥80% 3'-phosphate removal (ADP, 37°C, 30 min)	85.1%	PASS
ATP Dependence	<5% phosphorylation without ATP	<1%	PASS
Exonuclease Contamination	No detectable degradation (λ DNA, 200 U, 4 h, 37°C)	None detected	PASS
Endonuclease Activity	No nicking of supercoiled pUC19 (200 U, 4 h, 37°C)	None detected	PASS
RNase Activity	No degradation of 5 μg RNA (200 U, 2 h, 37°C)	None detected	PASS
pH (formulation buffer)	7.2–7.6	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, 50% glycerol.

Unit Definition

One unit (U) is defined as the amount of T4 PNK required to catalyze the transfer of ≥90% of the γ -phosphate from 1 nmol of [γ -³²P]-ATP to a 5'-OH oligonucleotide substrate in 30 minutes at 37°C in a 20 μL reaction containing 1× T4 PNK Buffer.

Quality Release Statement

This lot of T4 Polynucleotide Kinase (T4 PNK) (EV-MOL-003) 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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