Certificate of Analysis

Klenow Fragment (3’→5’ exo-) | EV-MOL-004

Product Name	Klenow Fragment (3’→5’ exo-)	**Lot Number**	EZV-KL-2604-001
Catalog Number	EV-MOL-004	**Manufacture Date**	April 2026
Size	200 U / 1,000 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 ~68 kDa)	96.8%	PASS
Molecular Weight	~68 kDa (SDS-PAGE)	68 kDa	PASS
Concentration	5 U/µL	5.2 U/µL	PASS
5’ Fill-in Activity	Complete blunting of 5’ overhangs (100 µM dNTPs, 37°C, 15 min)	Complete	PASS
3’→5’ Exo- Verification	<5% substrate degradation (200 U, no dNTPs, 37°C, 1 h)	<2% degradation	PASS
Strand Displacement (absent)	No displacement detected (nick-translation assay)	None detected	PASS
Exonuclease Contamination	No detectable degradation (λDNA, 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 Klenow Fragment (exo-) required to incorporate 10 nmol of dNTP into acid-insoluble material in 30 minutes at 37°C in a 50 µL reaction containing primed activated calf thymus DNA and 33 µM each dNTP.

Quality Release Statement

This lot of Klenow Fragment (3'→5' exo-) (EV-MOL-004) has been tested according to the specifications listed above and meets all release criteria. This Certificate of Analysis is issued by Enzovera Life Sciences LLC Quality Assurance department.

Quality Assurance Signature: Date Issued: April 2026

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QA Director, Enzovera Life Sciences LLC