

CERTIFICATE OF ANALYSIS

PRODUCT IDENTIFICATION

Product Name	HP Hairpin Reagent (7-deaza dATP, 1ml)
Catalog Number	EV-SGR-010
Category	Sanger Sequencing Additive
Lot Number	LOT-PENDING — Enter lot number on release
Manufacturing Date	See product label
Expiry Date	See product label
Storage Conditions	-20°C, protect from light
Appearance	Clear colorless solution
Grade	Research Grade
Regulatory Status	For Research Use Only (RUO)

SPECIFICATIONS AND TEST RESULTS

Parameter	Specification	Test Method	Result	Pass/Fail
Identity (7-deaza-dATP)	Retention time matches reference standard ± 0.5 min; UV absorption ratio $A_{260}/A_{280} = 1.0-1.2$	RP-HPLC with UV detection at 260 nm and 280 nm	Conforms	PASS
Concentration	9.5-10.5 mM (nominal 10 mM)	UV spectrophotometry at 260 nm using $\epsilon = 6,900 \text{ M}^{-1}\text{cm}^{-1}$	Conforms	PASS
Purity (HPLC)	$\geq 98\%$ 7-deaza-dATP by peak area; impurities $< 2\%$ total	RP-HPLC with gradient elution, UV detection at 260 nm	Conforms	PASS
pH	7.0-8.0 at 25°C	pH meter calibrated with standard buffers	Conforms	PASS
Functional Performance (Hairpin Resolution)	$\geq 90\%$ base call accuracy through GC-rich hairpin template ($\geq 70\%$ GC); read length ≥ 650 bp with QV20	Cycle sequencing with pGEM-GC control template, capillary electrophoresis on ABI 3730xl, Phred quality score analysis	Conforms	PASS
Nuclease Contamination	No degradation of 1 μg supercoiled plasmid DNA after 16 h at 37°C	Agarose gel electrophoresis with ethidium bromide staining	Conforms	PASS
Sterility	No microbial growth detected	USP <71> Sterility Test: 14-day incubation in TSB and FTM media at 22.5°C and 32.5°C	Conforms	PASS

RELEASE AUTHORISATION

QC Status	RELEASED — Meets Enzovera Life Sciences specifications
Authorised By	Enzovera Quality Control Department
Issue Date	2026-05-07
Document Number	CoA-EV-SGR-010-LOT-PENDING

This Certificate of Analysis confirms that the above product lot meets Enzovera Life Sciences quality specifications at the time of manufacture. For technical assistance, contact techsupport@enzovera.com.
For Research Use Only. Not for use in diagnostic procedures.