

dNTP Mix, 100mM (Sodium Salt)

Suitable for Research and further Manufacturing Use

Catalog No:	MDX084
Lot No:	B344350
Storage Conditions:	-20°C
Component Lot No:	425207A
Retest date:	August 2027

Quality Control Parameters

dNTP Mix 100 mM

Sodium Salt 2' Deoxynucleoside 5'-triphosphate Mix (25 mM each dATP, dCTP, dGTP, dTTP)

Molecular Biology Grade, prepared with >99% purity of each single nucleotide

Analysis	Specification	Result
Concentration (at $\epsilon_{260} = 10.975 \text{ E} \times \text{mmol}^{-1} \times \text{cm}^{-1}$)	100 mM \pm 3 mM	Passed
Functional	A 3Kb Lambda DNA fragment is amplified with a dilution series of dNTPs, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained). Each batch is tested for performance in a wide range of PCR templates with <i>Taq</i> and <i>Pfu</i> DNA polymerases, tested for performance with Q-PCR.	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase contamination	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection 2.5×10^{-3} U DNase.	Passed
RNase contamination	Quantitative PCR analysis with high and low RNase standards. Test sample must show less RNase activity than the limit of detection 9.7×10^{-3} ng/ μ L RNase.	Passed
Phosphatase activity	Tested for a wide range of phosphatases. Test sample must be free of phosphatases.	Passed
Nicking Activity	Incubation of dNTP mix with supercoiled control plasmid. Analysed by agarose gel electrophoresis. Test sample does not show an increase of linearized or relaxed plasmid.	Passed

QA / QC Representative:  J. Rahnenführer

Date: 7th July 2025

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