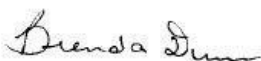


CERTIFICATE OF ANALYSIS

Catalog #:	MDX101	Lot #:	2A02522
Description:	dTTP, 100 mM (Lithium Salt) 2'-Deoxythymidine-5'-Triphosphate Tetralithium Salt Solution		
Purity:	99.7% by HPLC (Triphosphate Content) Certified \leq 1% Deoxynucleoside Monophosphates and Deoxynucleoside Diphosphates.		
Concentration:	102mM (Optical Density Spectrophotometry) Specification: 100 mM \pm 5%		
pH (22-25°C):	7.5 – 8.0	Retest Date:	January, 2024
Functional Test:	A 3 Kb Lambda DNA fragment is amplified with a dilution series of dTTPs, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained). Results: PASSED 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.		
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. Results: PASSED		
DNase Contamination:	Incubation of a 1 Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analyzed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection, 2.5×10^{-3} U DNase. Results: PASSED Certified free of nucleases (DNase, RNase), phosphatases.		
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. Results: PASSED Certified free of nucleases (DNase, RNase), phosphatases.		
Nicking Activity:	Incubation of dTTP mix with supercoiled control plasmid. Analyzed by agarose gel electrophoresis. Test sample does not show an increase of linearized or relaxed plasmid. Results: PASSED		
Applications:	For use in PCR, cDNA synthesis, DNA sequencing and labeling procedures.		
Storage:	Store at -20°C. Avoid freeze/thaw cycles or exposure to frequent temperature changes.		
Safety Note(s):	Refer to the appropriate Safety Data Sheet (SDS) for additional information.		

Quality Signature: 

26JAN2022

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY