Certificate of Analysis

Product Name:	dCTP (100 mM)				
Cat No.:	RK20113	**Lot No.:**	2021012201	**Exp:**	2022.01
Conc.:	100 mM			**Storage:**	-20°C

Assay Name/Specification (Minimum release criteria)	**Data**	**Result**
Physical Purity (HPLC) Deoxynucleotide (dNTP) Solution Mix is ≥ 99% pure as determined by HPLC analysis.	≥ 99%	Pass
PCR Amplification (1 kb Lambda DNA) A 50 µl reaction in 1X PCR Reaction Buffer, Mg2+ plus in the presence of 200 µM Deoxynucleotide (dNTP) Solution Mix and 0.5 µM primers containing 1 ng Lambda DNA with 1.25 units of Taq DNA Polymerase for 25 cycles of PCR amplification results in the expected 1 kb product	Expected 1 kb product	Pass
Non-Specific DNase Activity Specification: A 20 µl reaction in 1X DNaseI Buffer containing 1 µg of pUC19 DNA with Nuclease-free H2O incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	No Degradation	Pass
Endonuclease Activity (Nicking) - A 20 µl reaction in ABuffer S containing 1 µg of supercoiled PhiX174 DNA with Nuclease-free H2O incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<10%	Pass
Exonuclease Activity A 20 µl reaction in ABuffer S containing 2.5 µM of single or double-stranded fluorescent-labeled DNA with Nuclease-free H2O incubated for 16 hours at 37ºC. No detectable nuclease degradation as determined by polyacrylamide gel electrophoresis.	No Degradation	Pass
RNase Activity A 20 µl reaction in ABuffer S containing 500 ng total RNA with Nuclease-free H2O is incubated at 37°C. After incubation for 4 hours, the substrate RNA remains intact as determined by gel electrophoresis.	No Degradation	Pass

Conclusion:
In compliance.

Authorized By: Li Shuangjie

Tested By: Wang Yuhong

Date: 2021-01-26

ABclonal Biotechnology Co, Ltd