

### Certificate of Analysis

<b>Product Name:</b>	dATP (100 mM)				
<b>Cat No.:</b>	RK20110	<b>Lot No.:</b>	2021012701	<b>Exp:</b>	2022.01
<b>Conc.:</b>	100 mM			<b>Storage:</b>	-20°C

Assay Name/Specification (Minimum release criteria)	Data	Result
<b>Physical Purity (HPLC)</b> Deoxynucleotide (dNTP) Solution Mix is ≥ 99% pure as determined by HPLC analysis.	≥ 99%	Pass
<b>PCR Amplification (1 kb Lambda DNA)</b> A 50 µl reaction in 1X PCR Reaction Buffer, Mg <sup>2+</sup> 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
<b>Non-Specific DNase Activity</b> Specification: A 20 µl reaction in 1X DNaseI Buffer containing 1 µg of pUC19 DNA with Nuclease-free H <sub>2</sub> O 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
<b>Endonuclease Activity (Nicking)</b> - A 20 µl reaction in ABuffer S containing 1 µg of supercoiled PhiX174 DNA with Nuclease-free H <sub>2</sub> O incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<10%	Pass
<b>Exonuclease Activity</b> A 20 µl reaction in ABuffer S containing 2.5 µM of single or double-stranded fluorescent-labeled DNA with Nuclease-free H <sub>2</sub> O incubated for 16 hours at 37°C. No detectable nuclease degradation as determined by polyacrylamide gel electrophoresis.	No Degradation	Pass
<b>RNase Activity</b> A 20 µl reaction in ABuffer S containing 500 ng total RNA with Nuclease-free H <sub>2</sub> O 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:** 2021-01-29

**ABclonal Biotechnology Co, Ltd**

