

New England Biolabs Certificate of Analysis

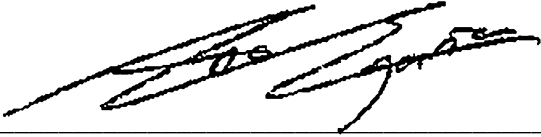
Product Name: T4 Polynucleotide Kinase Reaction Buffer
Catalog Number: B0201S
Concentration: 10 X Concentrate
Packaging Lot Number: 10157358
Expiration Date: 09/2024
Storage Temperature: -20°C
Specification Version: PS-B0201S v1.0
Composition (1X): 70 mM Tris-HCl, 10 mM MgCl₂, 5 mM DTT, (pH 7.6 @ 25°C)

T4 Polynucleotide Kinase Reaction Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B0201SVIAL	T4 Polynucleotide Kinase Reaction Buffer	10119056	Pass

Assay Name/Specification	Lot # 10157358
RNase Activity (Buffer) A 10 µl reaction in 1X T4 Polynucleotide Kinase Reaction Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by polyacrylamide gel electrophoresis.	Pass
Endonuclease Activity (Nicking, Buffer) A 50 µl reaction in 1X T4 Polynucleotide Kinase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Functional Testing (T4 PNK Reaction Buffer) A 50 µl reaction in 1X T4 Polynucleotide Kinase Reaction Buffer containing 66 µM ³² P-ATP, 0.26 mM 5'-hydroxyl-terminated salmon sperm DNA and 1 unit of T4 Polynucleotide Kinase incubated for 30 minutes at 37°C results in the incorporation of 1 nmol of acid insoluble ³² P as determined by scintillation counting.	Pass
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X T4 Polynucleotide Kinase Reaction Buffer containing 1 µg of HaeIII digested PhiX174 RF I DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Ana Egana
Production Scientist
06 Jul 2022



Erin Varney
Packaging Quality Control Inspector
06 Jul 2022