

New England Biolabs Certificate of Analysis

Product Name: T4 Polynucleotide Kinase Reaction Buffer
Catalog Number: B0201S
Concentration: 10 X Concentrate
Packaging Lot Number: 10244583
Expiration Date: 03/2027
Storage Temperature: -20°C
Specification Version: PS-B0201S v2.0
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	10230814	Pass

Assay Name/Specification	Lot # 10244583
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 (Reaction Buffer) Each lot of T4 Polynucleotide Kinase Reaction Buffer is functionally tested according to the unit definition for T4 Polynucleotide Kinase. Performance is directly compared to a control comprising a previously approved lot.	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
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

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.



Alison Dolan
Production Scientist
10 Apr 2024



Michael Tonello
Packaging Quality Control Inspector
03 Jun 2024