

New England Biolabs Certificate of Analysis

Product Name: NEBNext® End Repair Reaction Buffer
Catalog Number: B6052S
Concentration: 10 X Concentrate
Packaging Lot Number: 10070225
Expiration Date: 12/2021
Storage Temperature: -20°C
Specification Version: PS-B6052S v2.0
Composition (1X): 50 mM Tris-HCl, 10 mM MgCl₂, 10 mM DTT, 1 mM ATP, 0.4 mM dATP, 0.4 mM dCTP, 0.4 mM dGTP, 0.4 mM dTTP, (pH 7.5 @ 25°C)

NEBNext® End Repair Reaction Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B6052SVIAL	NEBNext® End Repair Reaction Buffer	10063991	Pass

Assay Name/Specification	Lot # 10070225
RNase Activity (Buffer) A 10 µl reaction in 1X NEBNext® End Repair 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 gel electrophoresis using fluorescent detection.	Pass
Phosphatase Activity (pNPP, Buffer) A 200 µl reaction in 1M Diethanolamine @ pH 9.8 and 0.5 mM MgCl ₂ containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 20 µl NEBNext® End Repair Reaction Buffer incubated for 4 hours at 37°C yields <0.00001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	Pass
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X NEBNext® End Repair Reaction Buffer containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII 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
Endonuclease Activity (Nicking, Buffer) A 50 µl reaction in 1X NEBNext® End Repair 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

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



Christine Sumner
Production Scientist
09 Mar 2020



Michael Tonello
Packaging Quality Control Inspector
09 Mar 2020