

New England Biolabs Certificate of Analysis

Product Name: NEBNext® End Repair Reaction Buffer
Catalog Number: B6052S
Concentration: 10 X Concentrate
Packaging Lot Number: 10116740
Expiration Date: 06/2023
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 | 10116741 | Pass |

| Assay Name/Specification | Lot # 10116740 |
|--|----------------|
| 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 |
| 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 |
| 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 |
| 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 |

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

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Christine Sumner
Production Scientist
09 Aug 2021



Michael Tonello
Packaging Quality Control Inspector
30 Nov 2021