

## New England Biolabs Certificate of Analysis

Product Name: NEBNext® FFPE DNA Repair Mix  
 Catalog Number: M6630L  
 Packaging Lot Number: 10149570  
 Expiration Date: 04/2023  
 Storage Temperature: -20°C  
 Specification Version: PS-M6630S/L v2.0

| NEBNext® FFPE DNA Repair Mix Component List |                                 |            |                      |
|---|---------------------------------|------------|----------------------|
| NEB Part Number                             | Component Description           | Lot Number | Individual QC Result |
| M6630LVIAL                                  | NEBNext® FFPE DNA Repair Mix    | 10144418   | Pass                 |
| E6622AAVIAL                                 | NEBNext® FFPE DNA Repair Buffer | 10144419   | Pass                 |

| Assay Name/Specification  | Lot # 10149570 |
|---|----------------|
| <p><b>PCR Amplification (1 kb)</b><br/>           A 48 µl reaction in ThermoPol® Reaction Buffer containing 1.5 ng of UV damaged Lambda DNA, 100 µM dNTPs, 500 µM NAD+ and 1 µl of the NEBNext® FFPE DNA Repair Mix was incubated for 15 minutes at 37°C. Addition of 100 µM dNTPs, 0.4 µM L1 primer mix and 2.5 units of Taq DNA Polymerase followed by 25 cycles of PCR resulted in the expected 1 kb specific product.</p>   | Pass           |
| <p><b>Functional Testing (FFPE Repair Mix)</b><br/>           Pretreatment with NEBNext® FFPE DNA Repair Mix improves the quality of base calling, especially C &amp; G for FFPE DNA, when compared to an untreated control as determined by sequencing on the Illumina® platform. NEBNext® FFPE DNA Repair Mix lowers the C:T (same as G:A) mutation for FFPE DNA, which is due to cytosine deamination to U, when compared to an untreated control as determined by sequencing on the Illumina® platform.</p> | Pass           |
| <p><b>Functional Testing (Oligonucleotide Cleavage - Thymine Glycol)</b><br/>           A 10 µl reaction in ThermoPol® Reaction Buffer containing 2.5 pmol of annealed oligo containing thymine glycol as the non-standard base and 1 µl of the NEBNext® FFPE DNA Repair Mix incubated for 20 minutes at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis.</p>   | Pass           |
| <p><b>Functional Testing (Oligonucleotide Cleavage - 8-oxo-guanine)</b><br/>           A 10 µl reaction in ThermoPol® Reaction Buffer containing 2.5 pmol of annealed oligo containing 8-oxo-guanine as the non-standard base and 1 µl of the NEBNext® FFPE DNA Repair Mix incubated for 1 hour at 37°C resulted in &gt;70% cleavage as determined by</p>   | Pass           |

| Assay Name/Specification   | Lot # 10149570     |
|--|--------------------|
| <p>polyacrylamide gel electrophoresis.</p> <p><b>Functional Testing (Oligonucleotide Cleavage - Uracil)</b><br/>           A 10 µl reaction in ThermoPol® Reaction Buffer containing 2.5 pmol of annealed oligo containing uracil as the non-standard base and 1 µl of the NEBNext® FFPE DNA Repair Mix incubated for 10 minutes at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis.</p> | <p><b>Pass</b></p> |

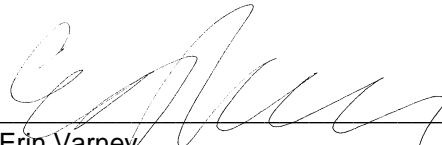
This product has been tested and shown to be in compliance with all specifications.

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Christine Sumner  
Production Scientist  
18 Apr 2022




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Erin Varney  
Packaging Quality Control Inspector  
18 Apr 2022