

New England Biolabs Certificate of Analysis

Product Name: NEBNext® FFPE DNA Repair Mix
 Catalog Number: M6630S
 Packaging Lot Number: 10169946
 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 |
| M6630SVIAL | NEBNext® FFPE DNA Repair Mix | 10144421 | Pass |
| E6622AVIAL | NEBNext® FFPE DNA Repair Buffer | 10144422 | Pass |

| Assay Name/Specification | Lot # 10169946 |
|---|----------------|
| <p>Functional Testing (Oligonucleotide Cleavage - Uracil) 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 >70% cleavage as determined by polyacrylamide gel electrophoresis.</p> | Pass |
| <p>PCR Amplification (1 kb) 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>Functional Testing (Oligonucleotide Cleavage - 8-oxo-guanine) 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 >70% cleavage as determined by polyacrylamide gel electrophoresis.</p> | Pass |
| <p>Functional Testing (Oligonucleotide Cleavage - Thymine Glycol) 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 >70% cleavage as determined by polyacrylamide gel electrophoresis.</p> | Pass |

| Assay Name/Specification | Lot # 10169946 |
|---|--------------------|
| <p>Functional Testing (FFPE Repair Mix) Pretreatment with NEBNext[®] FFPE DNA Repair Mix improves the quality of base calling, especially C & 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> | <p>Pass</p> |

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.



Christine Sumner
Production Scientist
28 Oct 2022



Michael Tonello
Packaging Quality Control Inspector
28 Oct 2022