

New England Biolabs Certificate of Analysis

Product Name: NEBNext[®] FFPE DNA Repair Mix
Catalog Number: M6630L
Lot Number: 10056183
Expiration Date: 07/2020
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 | 10050875 | Pass |
| E6622AAVIAL | NEBNext [®] FFPE DNA Repair Buffer | 10050876 | Pass |

| Assay Name/Specification | Lot # 10056183 |
|---|----------------|
| <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 - 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>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> | 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</p> | Pass |

| Assay Name/Specification | Lot # 10056183 |
|---|--------------------|
| <p>by polyacrylamide gel electrophoresis.</p> <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> | <p>Pass</p> |

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



Christine Sumner
Production Scientist
19 Sep 2019



Josh Hersey
Packaging Quality Control Inspector
19 Sep 2019