

New England Biolabs Certificate of Analysis

Product Name: NEBNext[®] FFPE DNA Repair Mix
Catalog Number: M6630S
Packaging Lot Number: 10165221
Expiration Date: 10/2023
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	10165222	Pass
E6622AVIAL	NEBNext [®] FFPE DNA Repair Buffer	10165223	Pass

Assay Name/Specification	Lot # 10165221
<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>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 - 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
<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</p>	Pass

Assay Name/Specification	Lot # 10165221
<p>polyacrylamide gel electrophoresis.</p> <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>	<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
14 Nov 2022



Michael Tonello
Packaging Quality Control Inspector
19 Jan 2023