

## New England Biolabs Certificate of Analysis

**Product Name:** NEBNext<sup>®</sup> FFPE DNA Repair Mix  
**Catalog Number:** M6630S  
**Packaging Lot Number:** 10213143  
**Expiration Date:** 11/2024  
**Storage Temperature:** -20°C  
**Specification Version:** PS-M6630S/L v2.0

NEBNext <sup>®</sup> FFPE DNA Repair Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M6630SVIAL	NEBNext <sup>®</sup> FFPE DNA Repair Mix	10213144	Pass
E6622AVIAL	NEBNext <sup>®</sup> FFPE DNA Repair Buffer	10213145	Pass

Assay Name/Specification	Lot # 10213143
<p><b>Functional Testing (FFPE Repair Mix)</b>            Pretreatment with NEBNext<sup>®</sup> 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<sup>®</sup> platform. NEBNext<sup>®</sup> 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<sup>®</sup> platform.</p>	<b>Pass</b>
<p><b>Functional Testing (Oligonucleotide Cleavage - 8-oxo-guanine)</b>            A 10 µl reaction in ThermoPol<sup>®</sup> Reaction Buffer containing 2.5 pmol of annealed oligo containing 8-oxo-guanine as the non-standard base and 1 µl of the NEBNext<sup>®</sup> FFPE DNA Repair Mix incubated for 1 hour at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis.</p>	<b>Pass</b>
<p><b>Functional Testing (Oligonucleotide Cleavage - Thymine Glycol)</b>            A 10 µl reaction in ThermoPol<sup>®</sup> Reaction Buffer containing 2.5 pmol of annealed oligo containing thymine glycol as the non-standard base and 1 µl of the NEBNext<sup>®</sup> FFPE DNA Repair Mix incubated for 20 minutes at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis.</p>	<b>Pass</b>
<p><b>Functional Testing (Oligonucleotide Cleavage - Uracil)</b>            A 10 µl reaction in ThermoPol<sup>®</sup> Reaction Buffer containing 2.5 pmol of annealed oligo containing uracil as the non-standard base and 1 µl of the NEBNext<sup>®</sup> FFPE DNA Repair Mix incubated for 10 minutes at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis.</p>	<b>Pass</b>

Assay Name/Specification	Lot # 10213143
<p><b>PCR Amplification (1 kb)</b> A 48 µl reaction in ThermoPol® Reaction Buffer containing 1.5 ng of UV damaged Lambda DNA, 100 µM dNTPs, 500 µM NAD<sup>+</sup> 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>	<p><b>Pass</b></p>

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

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08 Dec 2023



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08 Dec 2023