

## New England Biolabs Certificate of Analysis

Product Name: *PreCR<sup>®</sup> Repair Mix*  
 Catalog Number: *M0309L*  
 Packaging Lot Number: *10221378*  
 Expiration Date: *12/2024*  
 Storage Temperature: *-20°C*  
 Storage Conditions: *Proprietary*  
 Specification Version: *PS-M0309S/L v2.0*

PreCR <sup>®</sup> Repair Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S1284AVIAL	L1 Primer Mix	10195872	Pass
N3017AVIAL	UV DNA	10197209	Pass
M0309LVIAL	PreCR <sup>®</sup> Repair Mix	10221379	Pass
B9007SVIAL	β-Nicotinamide adenine dinucleotide (NAD <sup>+</sup> )	10208122	Pass
B9004SVIAL	ThermoPol <sup>®</sup> Reaction Buffer Pack	10201526	Pass

Assay Name/Specification	Lot # 10221378
<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 PreCR<sup>®</sup> Repair Mix incubated for 1 hour at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis</p>	Pass
<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 PreCR<sup>®</sup> 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 - 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 PreCR<sup>®</sup> Repair Mix incubated for 10 minutes at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis</p>	Pass
<p><b>PCR Amplification (1 kb, PreCR<sup>®</sup>)</b>            A 48 µl reaction in ThermoPol<sup>®</sup> Reaction Buffer containing 1.5 ng of UV damaged</p>	Pass

Assay Name/Specification	Lot # 10221378
Lambda DNA, 100 µM dNTPs, 500 µM NAD <sup>+</sup> and 1 µl of the PreCR <sup>®</sup> 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.	

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](http://www.neb.com/trademarks) for additional information.

  
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 28 Dec 2023

  
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 Packaging Quality Control Inspector  
 10 Jan 2024