

## New England Biolabs Certificate of Analysis

Product Name: PreCR<sup>®</sup> Repair Mix  
Catalog Number: M0309S  
Packaging Lot Number: 10149353  
Expiration Date: 04/2023  
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	10136032	Pass
N3017AVIAL	UV DNA	10115744	Pass
M0309SVIAL	PreCR <sup>®</sup> Repair Mix	10149352	Pass
B9007SVIAL	β-Nicotinamide adenine dinucleotide (NAD <sup>+</sup> )	10140406	Pass
B9004SVIAL	ThermoPol <sup>®</sup> Reaction Buffer Pack	10143500	Pass

Assay Name/Specification	Lot # 10149353
<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 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.</p>	Pass
<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 - 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>Functional Testing (Oligonucleotide Cleavage - Thymine Glycol)</b></p>	Pass

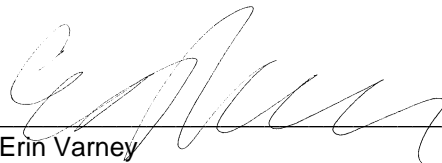
Assay Name/Specification	Lot # 10149353
A 10 µl reaction in ThermoPol <sup>®</sup> Reaction Buffer containing 2.5 pmol of annealed oligo containing thymine glycol as the non-standard base and 1 µl of the PreCR <sup>®</sup> Repair Mix incubated for 20 minutes at 37°C resulted in >70% cleavage as determined by polyacrylamide gel electrophoresis	

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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