

## New England Biolabs Certificate of Analysis

Product Name: PreCR<sup>®</sup> Repair Mix  
 Catalog Number: M0309L  
 Packaging Lot Number: 10136030  
 Expiration Date: 02/2023  
 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
M0309LVIAL	PreCR <sup>®</sup> Repair Mix	10136028	Pass
B9007SVIAL	β-Nicotinamide adenine dinucleotide (NAD <sup>+</sup> )	10140406	Pass
B9004SVIAL	ThermoPol <sup>®</sup> Reaction Buffer Pack	10139748	Pass

Assay Name/Specification	Lot # 10136030
<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 - 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>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 - Thymine Glycol)</b></p>	Pass

Assay Name/Specification	Lot # 10136030
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 PreCR® 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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04 Mar 2022



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04 Mar 2022