

## New England Biolabs Certificate of Analysis

Product Name: PreCR<sup>®</sup> Repair Mix  
 Catalog Number: M0309S  
 Packaging Lot Number: 10115739  
 Expiration Date: 07/2022  
 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   | 10100439   | Pass                 |
| N3017AVIAL                                   | UV DNA  | 10115744   | Pass                 |
| M0309SVIAL                                   | PreCR <sup>®</sup> Repair Mix                           | 10115740   | Pass                 |
| B9007SVIAL                                   | β-Nicotinamide adenine dinucleotide (NAD <sup>+</sup> ) | 10096429   | Pass                 |
| B9004SVIAL                                   | ThermoPol <sup>®</sup> Reaction Buffer Pack             | 10113098   | Pass                 |

| Assay Name/Specification   | Lot # 10115739 |
|--|----------------|
| <p><b>PCR Amplification (1 kb, PreCR<sup>®</sup>)</b><br/>           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><br/>           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><br/>           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 # 10115739 |
|--|----------------|
| 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.

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Lauren Higgins  
Production Scientist  
23 Aug 2021



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Michael Tonello  
Packaging Quality Control Inspector  
23 Aug 2021