

## New England Biolabs Certificate of Analysis

Product Name: PreCR<sup>®</sup> Repair Mix  
 Catalog Number: M0309L  
 Packaging Lot Number: 10083608  
 Expiration Date: 09/2021  
 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   | 10080831   | Pass                 |
| N3017AVIAL                                   | UV DNA  | 10080832   | Pass                 |
| M0309LVIAL                                   | PreCR <sup>®</sup> Repair Mix                           | 10083606   | Pass                 |
| B9007SVIAL                                   | β-Nicotinamide adenine dinucleotide (NAD <sup>+</sup> ) | 10060529   | Pass                 |
| B9004SVIAL                                   | ThermoPol <sup>®</sup> Reaction Buffer Pack             | 10072023   | Pass                 |
| B9000SVIAL                                   | BSA, Molecular Biology Grade                            | 10082650   | Pass                 |

| Assay Name/Specification   | Lot # 10083608 |
|--|----------------|
| <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 - 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><br/>           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           |

| Assay Name/Specification   | Lot # 10083608     |
|--|--------------------|
| <p><b>Functional Testing (Oligonucleotide Cleavage - 8-oxo-guanine)</b><br/>A 10 µl reaction in ThermoPol® Reaction Buffer containing 2.5 pmol of annealed oligo containing 8-oxo-guanine as the non-standard base and 1 µl of the PreCR® Repair Mix incubated for 1 hour at 37°C resulted in &gt;70% cleavage as determined by polyacrylamide gel electrophoresis</p> | <p><b>Pass</b></p> |

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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05 Oct 2020



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05 Oct 2020