

New England Biolabs Certificate of Analysis

Product Name: PreCR[®] Repair Mix
Catalog Number: M0309S
Lot Number: 10051012
Expiration Date: 03/2021
Storage Temperature: -20°C
Storage Conditions: Proprietary
Specification Version: PS-M0309S/L v1.0

| PreCR [®] Repair Mix Component List | | | |
|--|---|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| S1284AVIAL | L1 Primer Mix | 10040053 | Pass |
| N3017AVIAL | UV DNA | 10040051 | Pass |
| M0309SVIAL | PreCR [®] Repair Mix | 10040050 | Pass |
| B9007SVIAL | β-Nicotinamide adenine dinucleotide (NAD ⁺) | 10041143 | Pass |
| B9004SVIAL | ThermoPol [®] Reaction Buffer Pack | 10041932 | Pass |
| B9000SVIAL | BSA, Molecular Biology Grade | 10041006 | Pass |

| Assay Name/Specification | Lot # 10051012 |
|---|----------------|
| Functional Testing (Oligonucleotide Cleavage - 8-oxo-guanine) 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 >70% cleavage as determined by polyacrylamide gel electrophoresis | Pass |
| Functional Testing (Oligonucleotide Cleavage - Thymine Glycol) 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 | Pass |
| Functional Testing (Oligonucleotide Cleavage - Uracil) A 10 µl reaction in ThermoPol [®] Reaction Buffer containing 2.5 pmol of annealed oligo containing uracil as the non-standard base and 1 µl of the PreCR [®] Repair Mix incubated for 10 minutes at 37°C resulted in >70% cleavage as determined by polyacrylamide gel electrophoresis | Pass |
| PCR Amplification (1 kb, PreCR[®]) | Pass |

| Assay Name/Specification | Lot # 10051012 |
|--|----------------|
| A 48 µl reaction in ThermoPol® Reaction Buffer containing 1.5 ng of UV damaged Lambda DNA, 100 µM dNTPs, 500 µM NAD ⁺ and 1 µl of the PreCR® 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.



Lauren Sears Higgins
Production Scientist
04 Apr 2019



Michael Tonello
Packaging Quality Control Inspector
16 Aug 2019