NEW ENGLAND BioLabs Inc.
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New England Biolabs
Certificate of Analysis

Product Name: *PreCR® Repair Mix*
Catalog Number: *M0309L*
Lot Number: *10028062*
Expiration Date: *11/2020*
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	10028069	**Pass**
N3017AVIAL	UV DNA	10028070	**Pass**
M0309LVIAL	PreCR® Repair Mix	10031636	**Pass**
B9007SVIAL	β-Nicotinamide adenine dinucleotide (NAD^+)	10025687	**Pass**
B9004SVIAL	ThermoPol® Reaction Buffer Pack	0031712	**Pass**
B9000SVIAL	BSA, Molecular Biology Grade	10028759	**Pass**

Assay Name/Specification	Lot # 10028062
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**

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Assay Name/Specification	Lot # 10028062
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
24 Oct 2018

Michael Tonello
Packaging Quality Control Inspector
08 Jan 2019