

New England Biolabs Certificate of Analysis

Product Name: PreCR[®] Repair Mix
 Catalog Number: M0309S
 Packaging Lot Number: 10191108
 Expiration Date: 11/2023
 Storage Temperature: -20°C
 Storage Conditions: Proprietary
 Specification Version: PS-M0309S/L v2.0

PreCR [®] Repair Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S1284AVIAL	L1 Primer Mix	10176792	Pass
N3017AVIAL	UV DNA	10168779	Pass
M0309SVIAL	PreCR [®] Repair Mix	10168776	Pass
B9007SVIAL	β-Nicotinamide adenine dinucleotide (NAD ⁺)	10187354	Pass
B9004SVIAL	ThermoPol [®] Reaction Buffer Pack	10177927	Pass

Assay Name/Specification	Lot # 10191108
<p>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</p>	Pass
<p>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</p>	Pass
<p>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</p>	Pass
<p>PCR Amplification (1 kb, PreCR[®]) A 48 µl reaction in ThermoPol[®] Reaction Buffer containing 1.5 ng of UV damaged</p>	Pass

Assay Name/Specification	Lot # 10191108
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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Lauren Sears Higgins
Production Scientist
15 Dec 2022



Michael Tonello
Packaging Quality Control Inspector
02 May 2023