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## New England Biolabs Certificate of Analysis

Product Name: NEBNext® High-Fidelity 2X PCR Master Mix

Catalog Number: M0541L

Concentration: 2 X Concentrate

Packaging Lot Number: 10067164
Expiration Date: 05/2021
Storage Temperature: -20°C

Specification Version: PS-M0541S/L v2.0

Composition (1X): Proprietary

| NEBNext® High-Fidelity 2X PCR Master Mix Component List |  |            |                      |
|---|--|------------|----------------------|
| <b>NEB Part Number</b>                                  | Component Description                    | Lot Number | Individual QC Result |
| M0541SVIAL  | NEBNext® High-Fidelity 2X PCR Master Mix | 10067165   | Pass                 |

| Assay Name/Specification   | Lot # 10067164 |
|--|----------------|
| Phosphatase Activity (pNPP)  | Pass           |
| A 200 µl reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl2 containing 2.5 mM       |                |
| p-Nitrophenyl Phosphate (pNPP) and a minimum of 20 µl of NEBNext® High-Fidelity 2X   |                |
| PCR Master Mix incubated for 4 hours at 37°C yields <0.00001 unit of alkaline        |                |
| phosphatase activity as determined by spectrophotometric analysis.                   |                |
| PCR Amplification (Master Mix)   | Pass           |
| A 50 μl reaction containing 0.5 μM primers with 20 ng human genomic DNA and 1X       |                |
| NEBNext® High-Fidelity 2X PCR Master Mix for 30 cycles of PCR amplification results  |                |
| in the expected 737 bp product.  |                |
| Non-Specific DNase Activity (16 hour, Master Mix)                                    | Pass           |
| A 50 µl reaction in 1X NEBNext® High-Fidelity 2X PCR Master Mix containing 1 µg of   |                |
| T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for   |                |
| 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as |                |
| determined by agarose gel electrophoresis.   |                |

This product has been tested and shown to be in compliance with all specifications.



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Christine Sumner Production Scientist 07 Feb 2020 Jay Minichiello

Packaging Quality Control Inspector

15 May 2020