# New England Biolabs Certificate of Analysis 

| Product Name: | NEBNext® High-Fidelity 2X PCR Master Mix |
| :--- | :--- |
| Catalog Number: | M0541L |
| Concentration: | $2 \times$ Concentrate |
| Packaging Lot Number: | 10072547 |
| Expiration Date: | $08 / 2021$ |
| Storage Temperature: | $-20^{\circ} \mathrm{C}$ |
| Specification Version: | PS-M0541S/L v2.0 |
| Composition (1X): | Proprietary |


| NEBNext® High-Fidelity 2X PCR Master Mix Component List |  |  |  |
| :--- | :--- | :--- | :---: |
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0541SVIAL | NEBNext® High-Fidelity 2X PCR Master Mix | 10072548 | Pass |


| Assay Name/Specification | Lot \# 10072547 |
| :---: | :---: |
| Phosphatase Activity (pNPP) <br> A $200 \mu \mathrm{l}$ reaction in 1 M Diethanolamine, $\mathrm{pH} 9.8,0.5 \mathrm{mM} \mathrm{MgCl} 2$ containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of $20 \mu$ of NEBNext®® High-Fidelity 2 X PCR Master Mix incubated for 4 hours at $37^{\circ} \mathrm{C}$ yields $<0.00001$ unit of alkaline phosphatase activity as determined by spectrophotometric analysis. | Pass |
| Non-Specific DNase Activity ( $\mathbf{1 6}$ hour, Master Mix) <br> A $50 \mu \mathrm{l}$ reaction in 1X NEBNext® High-Fidelity 2X PCR Master Mix containing $1 \mu \mathrm{~g}$ of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at $37^{\circ} \mathrm{C}$ results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |
| PCR Amplification (Master Mix) <br> A $50 \mu \mathrm{l}$ reaction containing $0.5 \mu \mathrm{M}$ primers with 20 ng human genomic DNA and 1 X NEBNext® High-Fidelity 2X PCR Master Mix for 30 cycles of PCR amplification results in the expected 737 bp product. | Pass |

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.


Melissa Cormier
Production Scientist 28 Jul 2020


Michael Tonello
Packaging Quality Control Inspector
17 Sep 2020

