

## New England Biolabs Certificate of Analysis

*Product Name:* NEBNext<sup>®</sup> High-Fidelity 2X PCR Master Mix  
*Catalog #:* M0541S/L  
*Concentration:* 2X Concentrate  
*Lot #:* 0231802  
*Assay Date:* 02/2018  
*Expiration Date:* 08/2019  
*Storage Temp:* -20°C  
*Composition (1X):* Proprietary  
*Specification Version:* PS-M0541S/L v1.0  
*Effective Date:* 13 Jun 2018

Assay Name/Specification (minimum release criteria)	Lot #0231802
<b>Non-Specific DNase Activity (16 hour, Master Mix)</b> - A 50 µl reaction in 1X NEBNext <sup>®</sup> High-Fidelity 2X PCR Master Mix containing 1 µg of T3 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.	<b>Pass</b>
<b>PCR Amplification (Master Mix)</b> - A 50 µl reaction containing 0.5 µM primers with 20 ng human genomic DNA and 1X NEBNext <sup>®</sup> High-Fidelity 2X PCR Master Mix for 30 cycles of PCR amplification results in the expected 737 bp product.	<b>Pass</b>
<b>Phosphatase Activity (pNPP)</b> - A 200 µl reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl <sub>2</sub> containing 2.5 mM <i>p</i> -Nitrophenyl Phosphate (pNPP) and a minimum of 20 µl of NEBNext <sup>®</sup> 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.	<b>Pass</b>



Authorized by  
Derek Robinson  
13 Jun 2018



Inspected by  
Sumner, Christine  
05 Feb 2018

