

## New England Biolabs Certificate of Analysis

**Product Name:** NEBNext® Q5® Hot Start HiFi PCR Master Mix  
**Catalog Number:** M0543S  
**Lot Number:** 10032685  
**Expiration Date:** 07/2020  
**Storage Temperature:** -20°C  
**Specification Version:** PS-M0543S/L v1.0

NEBNext® Q5® Hot Start HiFi PCR Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0543SVIAL	NEBNext® Q5® Hot Start HiFi PCR Master Mix	10018142	Pass

Assay Name/Specification	Lot # 10032685
<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 p-Nitrophenyl Phosphate (pNPP) and a minimum of 20 µl of NEBNext® Q5® Hot Start HiFi PCR Master Mix incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 hour, Master Mix)</b> A 50 µl reaction in 1X NEBNext® Q5® Hot Start HiFi 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>Functional Testing (Multiplex PCR, Bead Inhibition)</b> A 50 µl reaction in 1X NEBNext® Q5® Hot Start HiFi PCR Master Mix and 0.5 µM 3-plex primer mix containing 20 ng Human Genomic DNA for 30 cycles of PCR amplification results in the expected three amplicons and no inhibition of amplification in the presence of the beads.	<b>Pass</b>

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

*Christine Sumner*

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Christine Sumner  
Production Scientist  
17 Dec 2018

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
17 Dec 2018