

New England Biolabs Product Specification

Product Name: NEBNext[®] High-Fidelity 2X PCR Master Mix
Catalog #: M0541S/L
Concentration: 2X Concentrate
Shelf Life: 18 months
Storage Temp: -20°C
Composition (1X): Proprietary
Specification Version: PS-M0541S/L v2.0
Effective Date: 12 Feb 2020

Assay Name/Specification (minimum release criteria)

Non-Specific DNase Activity (16 hour, Master Mix) - 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.

PCR Amplification (Master Mix) - 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.

Phosphatase Activity (pNPP) - 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.

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.



Date 12 Feb 2020

Derek Robinson
Director, Quality Control

