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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 v1.0

Effective Date: 13 Jun 2018

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 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.

Derek Robinson

Director of Quality Control







Date