New England Biolabs

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New England Biolabs
Certificate of Analysis

Product Name:	*NEBNext® Ultra™ II Q5® Master Mix*
Catalog Number:	*M0544X*
Concentration:	*2 X Concentrate*
Packaging Lot Number:	*10235985*
Expiration Date:	*05/2025*
Storage Temperature:	*-20°C*
Specification Version:	*PS-M0544S/L/X v3.0*

NEBNext® Ultra™ II Q5® Master Mix Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
M0544XVIAL	NEBNext® Ultra™ II Q5® Master Mix	10235986	**Pass**

Assay Name/Specification	Lot # 10235985
Functional Testing (Multiplex PCR, Bead Inhibition) A 50 µl reaction in 1X NEBNext® Ultra™ II Q5® 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.	**Pass**
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X NEBNext Ultra II Q5 Master Mix containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
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® Ultra™ II Q5® Master Mix incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	**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.

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Christine Sumner
Production Scientist
15 Apr 2024

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Michael Tonello
Packaging Quality Control Inspector
17 Apr 2024