# New England Biolabs Certificate of Analysis 

Product Name:<br>Catalog Number:<br>Concentration:<br>Packaging Lot Number:<br>Expiration Date:<br>Storage Temperature:<br>Specification Version:<br>NEBNext® Ultra ${ }^{\text {TM }}$ II Q5® ${ }^{\text {® }}$ Master Mix<br>M0544X<br>$2 X$ Concentrate<br>10228240<br>03/2025<br>$-20^{\circ} \mathrm{C}$<br>PS-M0544S/L/X v3.0

## NEBNext® Ultra ${ }^{\text {TM }}$ II Q5® Master Mix Component List

| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| :--- | :--- | :--- | :---: |
| M0544XVIAL | NEBNext® Ultra ${ }^{\top M}$ II Q5® Master Mix | 10228241 | Pass |


| Assay Name/Specification | Lot \# 10228240 |
| :---: | :---: |
| Functional Testing (Multiplex PCR, Bead Inhibition) <br> A $50 \mu$ reaction in 1X NEBNext® Ultra ${ }^{\text {TM }}$ II Q5® Master Mix and $0.5 \mu \mathrm{M}$ 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 ( $\mathbf{1 6}$ hour, Buffer) <br> A $50 \mu \mathrm{l}$ reaction in 1X NEBNext Ultra II Q5 Master Mix containing $1 \mu \mathrm{~g}$ of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at $37^{\circ} \mathrm{C}$ results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |
| Phosphatase Activity (pNPP) <br> A $200 \mu \mathrm{l}$ reaction in 1 M Diethanolamine, $\mathrm{pH} 9.8,0.5 \mathrm{mM} \mathrm{MgCl} 2$ containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of $20 \mu \mathrm{l}$ of NEBNext® Ultra ${ }^{\text {TM }}$ II Q5® Master Mix incubated for 4 hours at $37^{\circ} \mathrm{C}$ 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.
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## Chustinn Summon

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| Registered |
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