**Product Name:** NEBuilder® HiFi DNA Assembly Master Mix  
**Catalog Number:** E2621G  
**Packaging Lot Number:** 10143670  
**Expiration Date:** 08/2023  
**Storage Temperature:** -20°C  
**Specification Version:** PS-E2621G v1.0

### NEBuilder® HiFi DNA Assembly Master Mix Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
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</thead>
<tbody>
<tr>
<td>N2611AVIAL</td>
<td>NEBuilder® Positive Control</td>
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<tr>
<td>M5520GVIAL</td>
<td>NEBuilder® High-Fidelity Master Mix</td>
<td>10132141</td>
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</table>

### Assay Name/Specification

**Assay Name/Specification**

<table>
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<tr>
<th>Lot # 10143670</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
</tr>
</tbody>
</table>

*** Individual Product Component Note**

Standard Quality Control Tests are performed for each component included in NEBuilder® HiFi DNA Assembly Master Mix and meet the designated specifications.

**Functional Testing (NEBuilder® HiFi DNA Assembly)**

10 µl of 2X NEBuilder® HiFi DNA Assembly Master Mix was incubated with 0.05 pmol each of 6 DNA fragments (4 fragments of 1,000 bp, one fragment of 1,152 bp with 80 bp overlap, and a vector of 3,373 bp with a 20 bp overlap) in a final volume of 20 µl at 50°C for 60 minutes. NEB® 5-alpha Competent E. coli (High Efficiency) were transformed with 2 µl of the assembled products. Successfully assembled fragments produce an intact lacZ gene in the pACYC184 vector, and yield blue colonies on an IPTG/Xgal/Chloramphenicol plate when incubated overnight at 37°C after transformation. Greater than 100 blue colonies were observed when 1/10 of the outgrowth (500 µl) was spread on a plate.

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](http://www.neb.com/trademarks) for additional information.
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03 Mar 2022

Michael Tonello
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03 Mar 2022