**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>
</tr>
</thead>
<tbody>
<tr>
<td>E2621L</td>
<td>NEBuilder® HiFi DNA Assembly Master Mix</td>
<td>10099643</td>
<td>Pass</td>
</tr>
</tbody>
</table>

**Assay Name/Specification**

<table>
<thead>
<tr>
<th>* Individual Product Component Note</th>
<th>Lot # 10099641</th>
</tr>
</thead>
</table>

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.

Pass

This product has been tested and shown to be in compliance with all specifications.

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Production Scientist
31 Mar 2021

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Packaging Quality Control Inspector
31 Mar 2021