

## New England Biolabs Certificate of Analysis

**Product Name:** NEBuilder<sup>®</sup> HiFi DNA Assembly Master Mix  
**Catalog Number:** E2621L  
**Packaging Lot Number:** 10179024  
**Expiration Date:** 07/2024  
**Storage Temperature:** -20°C  
**Specification Version:** PS-E2621S/X/L v2.0

NEBuilder <sup>®</sup> HiFi DNA Assembly Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N2611AVIAL	NEBuilder <sup>®</sup> Positive Control	10157948	Pass
M5520AAVIAL	NEBuilder <sup>®</sup> High-Fidelity Master Mix	10173992	Pass

Assay Name/Specification	Lot # 10179024
<b>Functional Testing (NEBuilder<sup>®</sup> HiFi DNA Assembly)</b> 10 µl of 2X NEBuilder <sup>®</sup> 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 <sup>®</sup> 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.	<b>Pass</b>
<b>* Individual Product Component Note</b> Standard Quality Control Tests are performed for each component included in NEBuilder <sup>®</sup> HiFi DNA Assembly Master Mix and meet the designated specifications.	<b>Pass</b>

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

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20 Jan 2023



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