

## New England Biolabs Certificate of Analysis

Product Name: NEBuilder<sup>®</sup> HiFi DNA Assembly Master Mix  
 Catalog Number: E2621L  
 Lot Number: 10008761  
 Expiration Date: 02/2019  
 Storage Temperature: -20°C  
 Specification Version: PS-E2621S/X/L v1.0

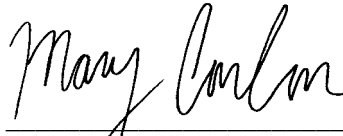
NEBuilder <sup>®</sup> HiFi DNA Assembly Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N2611AVIAL	Gibson Assembly <sup>®</sup> Positive Control	0171802	Pass
M5520AAVIAL	NEBuilder <sup>®</sup> High-Fidelity Master Mix	0141802	Pass

Assay Name/Specification	Lot # 10008761
<p><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.</p>	Pass
<p><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.</p>	Pass

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



Ana Egana  
Production Scientist  
25 May 2018



Mary Conlon  
Packaging Quality Control Inspector  
25 May 2018