

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: NEBuilder® HiFi DNA Assembly Master Mix

Catalog Number: E2621L
Lot Number: 10018071
Expiration Date: 06/2019
Storage Temperature: -20°C

Specification Version: PS-E2621S/X/L v1.0

NEBuilder® HiFi DNA Assembly Master Mix Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
N2611AVIAL	Gibson Assembly® Positive Control	0171802	Pass	
M5520AAVIAL	NEBuilder® High-Fidelity Master Mix	10009009	Pass	

Assay Name/Specification	Lot # 10018071
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
* Individual Product Component Note	Pass
Standard Quality Control Tests are performed for each component included in	
NEBuilder® HiFi DNA Assembly Master Mix and meet the designated specifications.	

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



E2621L / Lot: 10018071 Page 1 of 2 Cathy Shea
Production Scientist
25 Jun 2018

Michael Tonello

Packaging Quality Control Inspector

11 Sep 2018