

## New England Biolabs Certificate of Analysis

**Product Name:** NEBuilder<sup>®</sup> HiFi DNA Assembly Master Mix  
**Catalog Number:** E2621X  
**Packaging Lot Number:** 10077399  
**Expiration Date:** 03/2021  
**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
E2621L	NEBuilder <sup>®</sup> HiFi DNA Assembly Master Mix	10075388	Pass

Assay Name/Specification	Lot # 10077399
<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>	<b>Pass</b>
<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>	<b>Pass</b>

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



Ana Egana  
Production Scientist  
07 Jul 2020



Michael Tonello  
Packaging Quality Control Inspector  
07 Jul 2020