

New England Biolabs Certificate of Analysis

Product Name: *NEBuilder[®] HiFi DNA Assembly Cloning Kit*
 Catalog Number: *E5520S*
 Packaging Lot Number: *10180826*
 Expiration Date: *02/2024*
 Storage Temperature: *Multi-temperature**
 Specification Version: *PS-E5520S v2.0*

* This product contains components with different storage temperature requirements. Please reference the applicable product specification document(s) on the Quality and Safety tab located on the product page of www.neb.com.

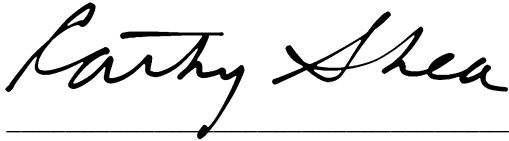
NEBuilder [®] HiFi DNA Assembly Cloning Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N3041AVIAL	pUC19 Vector	10173306	Pass
N2611AVIAL	NEBuilder [®] Positive Control	10157948	Pass
M5520AVIAL	NEBuilder [®] High-Fidelity Master Mix	10156826	Pass
C2987HVIAL	NEB [®] 5-alpha Competent E. coli (High Efficiency)	10167814	Pass
B9020SVIAL	SOC Outgrowth Medium	10166779	Pass

Assay Name/Specification	Lot # 10180826
<p>* Individual Product Component Note Standard Quality Control Tests are performed for each component included in NEBuilder[®] HiFi DNA Assembly Cloning Kit and meet the designated specifications.</p> <p>Functional Testing (NEBuilder[®] HiFi DNA Assembly) 10 µl of 2X NEBuilder[®] HiFi DNA Assembly Cloning Kit 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.</p>	<p>Pass</p> <p>Pass</p>

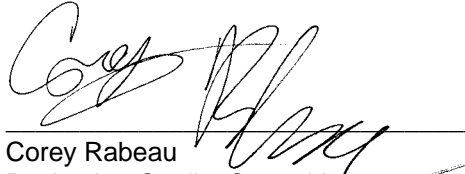
This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit

www.neb.com/trademarks for additional information.



Cathy Shea
Production Scientist
19 Aug 2022



Corey Rabeau
Packaging Quality Control Inspector
01 Mar 2023