

New England Biolabs Certificate of Analysis

Product Name: *NEBuilder[®] HiFi DNA Assembly Cloning Kit*
 Catalog Number: *E5520S*
 Lot Number: *10052223*
 Expiration Date: *06/2020*
 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	10047676	Pass
N2611AVIAL	NEBuilder [®] Positive Control	10043300	Pass
M5520AVIAL	NEBuilder [®] High-Fidelity Master Mix	10043296	Pass
C2987HVIAL	NEB [®] 5-alpha Competent E. coli (High Efficiency)	10044534	Pass
B9020SVIAL	SOC Outgrowth Medium	10045023	Pass

Assay Name/Specification	Lot # 10052223
<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>	Pass
<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>	Pass

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

Cathy Shea

Cathy Shea
Production Scientist
13 Jun 2019

Corey Rabeau

Corey Rabeau
Packaging Quality Control Inspector
15 Aug 2019