

New England Biolabs Certificate of Analysis

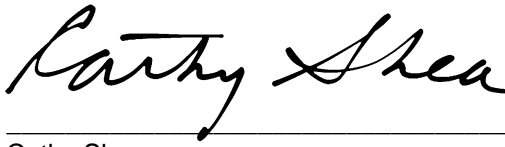
Product Name: *NEBuilder® HiFi DNA Assembly Cloning Kit*
 Catalog Number: *E5520S*
 Lot Number: *10030394*
 Expiration Date: *10/2019*
 Storage Temperature: *Multi-temperature**
 Specification Version: *PS-E5520S v2.0*

* 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.

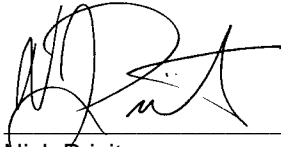
| NEBuilder® HiFi DNA Assembly Cloning Kit Component List | | | |
|---|--|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| N3041AVIAL | pUC19 Vector | 10025691 | Pass |
| N2611AVIAL | Gibson Assembly® Positive Control | 10021306 | Pass |
| M5520AVIAL | NEBuilder® High-Fidelity Master Mix | 10021302 | Pass |
| C2987HVIAL | NEB® 5-alpha Competent E. coli (High Efficiency) | 10024343 | Pass |
| B9020SVIAL | SOC Outgrowth Medium | 10018460 | Pass |

| Assay Name/Specification | Lot # 10030394 |
|--|----------------|
| <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
Production Scientist
27 Sep 2018



Nick Privitera
Packaging Quality Control Inspector
03 Dec 2018