

New England Biolabs Certificate of Analysis

Product Name: *NEBuilder[®] HiFi DNA Assembly Cloning Kit*
 Catalog Number: *E5520S*
 Lot Number: *10017219*
 Expiration Date: *06/2019*
 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 | 10010689 | Pass |
| N2611AVIAL | Gibson Assembly [®] Positive Control | 10009012 | Pass |
| M5520AVIAL | NEBuilder [®] High-Fidelity Master Mix | 10009010 | Pass |
| C2987HVIAL | NEB [®] 5-alpha Competent E. coli (High Efficiency) | 10013585 | Pass |
| B9020SVIAL | SOC Outgrowth Medium | 5731805 | Pass |

| Assay Name/Specification | Lot # 10017219 |
|---|----------------|
| <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
25 Jun 2018

Corey Rabeau

Corey Rabeau
Packaging Quality Control Inspector
07 Aug 2018