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New England Biolabs
Certificate of Analysis

Product Name: *NEBuilder® HiFi DNA Assembly Cloning Kit*
Catalog Number: *E5520S*
Packaging Lot Number: *10135798*
Expiration Date: *12/2022*
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	10129358	**Pass**
N2611AVIAL	NEBuilder® Positive Control	10111284	**Pass**
M5520AVIAL	NEBuilder® High-Fidelity Master Mix	10111279	**Pass**
C2987HVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10129667	**Pass**
B9020SVIAL	SOC Outgrowth Medium	10121877	**Pass**

Assay Name/Specification	Lot # 10135798
*** 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.	**Pass**
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.	**Pass**

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

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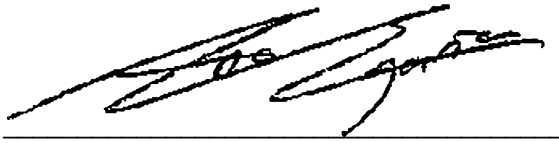
www.neb.com/trademarks for additional information.



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26 Jan 2022

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26 Jan 2022