

New England Biolabs Certificate of Analysis

Product Name: NEBuilder® HiFi DNA Assembly Cloning Kit

Catalog Number: E5520S
Packaging Lot Number: 10235613
Expiration Date: 03/2025

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	10226553	Pass	
N2611AVIAL	NEBuilder® Positive Control	10212946	Pass	
M5520AVIAL	NEBuilder® High-Fidelity Master Mix	10208205	Pass	
C2987HVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10214174	Pass	
B9020SVIAL	SOC Outgrowth Medium	10202702	Pass	

Assay Name/Specification	Lot # 10235613
* Individual Product Component Note	Pass
Standard Quality Control Tests are performed for each component included in	
NEBuilder® HiFi DNA Assembly Cloning Kit and meet the designated specifications.	
Functional Testing (NEBuilder® HiFi DNA Assembly)	Pass
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.	

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.

Lixin An

Production Scientist

26 Jan 2024

Nick Privitera

Packaging Quality Control Inspector

19 Apr 2024

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