NEW ENGLAND BioLabs® Inc.

240 County Road
Ipswich, MA 01938-2723

Tel 978-927-5054
Fax 978-921-1350

www.neb.com
info@neb.com

New England Biolabs
Product Specification

Product Name:	*NEBuilder® HiFi DNA Assembly Bundle for Large Fragments*
Catalog #:	*E2623S*
Kit Components:	*NEBuilder® HiFi DNA Assembly Master Mix (M5520) — Store at -20°C* *NEBuilder® Positive Control (N2611) — Store at -20°C* *NEB® 10-beta Competent E. coli (High Efficiency) (C3019) — Store at -80°C* *NEB® 10-beta/Stable Outgrowth Medium (B9035) — Store at 4°C* *pUC19 Vector (N3041) — Store at -20°C*
Shelf Life:	*12 months*
Storage Temp:	*Multi-temperature*
Specification Version:	*PS-E2623S v1.0*
Effective Date:	*01 Apr 2019*

Assay Name/Specification (minimum release criteria)
Functional Testing (NEBuilder® HiFi DNA Assembly) - 10 µl of 2X NEBuilder® HiFi DNA Assembly Master Mix 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.
*** Individual Product Component Note** - Standard Quality Control Tests are performed for each component included in NEBuilder® HiFi DNA Assembly Bundle for Large Fragments and meet the designated specifications.

Date 01 Apr 2019

Derek Robinson
Director of Quality Control

ISO 9001 Registered Quality Management
ISO 14001 Registered Environmental Management
ISO 13485 Registered Medical Devices