

New England Biolabs Certificate of Analysis

Product Name: NEBridge[®] Ligase Master Mix
 Catalog Number: M1100L
 Concentration: 3 X Concentrate
 Packaging Lot Number: 10222712
 Expiration Date: 12/2025
 Storage Temperature: -20°C
 Specification Version: PS-M1100S/L v1.0
 Composition (1X): Proprietary

NEBridge [®] Ligase Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M1100LVIAL	NEBridge [®] Ligase Master Mix	10222711	Pass

Assay Name/Specification	Lot # 10222712
<p>Functional Testing (Assembly) A 15 µl reaction containing 75 ng pGGaselect (Golden Gate destination plasmid, CamR), 75 ng each of 5 plasmids carrying fragments of a gene encoding lacI_Z, 1 µl of Bsal-HF v2 and 5 µl NEBridge Ligase Master Mix is incubated for 30 cycles of 37°C for 1 minute, 16°C for 1 minute, and then at 60°C for 5 minutes to linearize any remaining plasmid. Successfully assembled fragments result in lacI_Z gene in the pGGaselect vector and yield blue colonies on Cam/XGAL/IPTG agar plates. Transformation of T7 Express Competent E. coli (High Efficiency, NEB #C2566) with 2 µl of the assembly reaction yields >250 colonies and > 80% blue colonies when 5% of transformation is plated.</p>	Pass
<p>Functional Testing (Ligation and Transformation, Blunt Ends) After a 15 minute ligation of linearized, dephosphorylated LITMUS 28 containing blunt EcoRV ends and a mixture of compatible insert fragments, transformation into chemically competent NEB 5-alpha competent E. coli (high efficiency) cells yields a minimum of 106 recombinant transformants per µg plasmid DNA.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 1 containing 1 µg of CIP-treated Lambda-HindIII DNA and a minimum of 10 µl of NEBridge[™] Ligase Master Mix incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass

This product has been tested and shown to be in compliance with all specifications.



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Alison Dolan
Production Scientist
24 Jan 2024



Michael Tonello
Packaging Quality Control Inspector
24 Jan 2024