

## New England Biolabs Certificate of Analysis

*Product Name:* NEBridge® Ligase Master Mix  
*Catalog Number:* M1100L  
*Concentration:* 3 X Concentrate  
*Packaging Lot Number:* 10233987  
*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	10233988	Pass

Assay Name/Specification	Lot # 10233987
<p><b>Functional Testing (Assembly)</b>            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<sub>Z</sub>, 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<sub>Z</sub> 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 &gt;250 colonies and &gt; 80% blue colonies when 5% of transformation is plated.</p>	<b>Pass</b>
<p><b>Functional Testing (Ligation and Transformation, Blunt Ends)</b>            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>	<b>Pass</b>
<p><b>Non-Specific DNase Activity (16 Hour)</b>            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>	<b>Pass</b>

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

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08 Mar 2024



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Michael Tonello  
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11 Mar 2024