

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name:	NEBridge® Ligase Master Mix
Catalog Number:	M1100S
Concentration:	3 X Concentrate
Packaging Lot Number:	10233986
Expiration Date:	08/2025
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	
M1100SVIAL	NEBridge® Ligase Master Mix	10196316	Pass	

Assay Name/Specification	Lot # 10233986
<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 laclZ, 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 laclZ 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.	Pass
<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.	Pass
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.	Pass

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





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Michael Tonello Packaging Quality Control Inspector 04 Apr 2024

