

## New England Biolabs Certificate of Analysis

**Product Name:** NEBridge<sup>®</sup> Golden Gate Assembly Kit (BsmBI-v2)  
**Catalog Number:** E1602L  
**Packaging Lot Number:** 10179032  
**Expiration Date:** 01/2025  
**Storage Temperature:** -20°C  
**Specification Version:** PS-E1602S/L v3.0

NEBridge <sup>®</sup> Golden Gate Assembly Kit (BsmBI-v2) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0309AAVIAL	pGGAselect Destination Plasmid	10176100	Pass
M2617AAVIAL	NEBridge <sup>®</sup> Golden Gate Enzyme Mix (BsmBI-v2)	10176098	Pass
B0202SVIAL	T4 DNA Ligase Reaction Buffer	10153865	Pass

Assay Name/Specification	Lot # 10179032
<p><b>Functional Testing (Golden Gate Assembly)</b>            A 20 µl reaction containing 1X T4 DNA Ligase Buffer, 75 ng pGGAselect (Golden Gate destination plasmid, CamR), 75 ng each of 5 plasmids carrying fragments of a gene cassette encoding lacI<sub>Z</sub> and 1 µl NEBridge<sup>®</sup> Golden Gate Enzyme Mix (BsmBI-v2) containing T4 DNA Ligase and BsmBI-v2 is incubated for 30 cycles of 42°C for 1 minute, 16°C for 1 minute, then at 60°C for 5 minutes. Successfully assembled fragments result in functional lacI<sub>Z</sub> gene expression in pGGAselect vector and yield blue colonies on an IPTG/Xgal/Chloramphenicol plate. 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 the outgrowth is spread on an IPTG/ Xgal/Chloramphenicol plate and incubated overnight at 37°C.</p>	<b>Pass</b>
<p><b>* Individual Product Component Note</b>            Standard Quality Control Tests are performed for each component included in NEBridge<sup>®</sup> Golden Gate Assembly Kit (BsmBI-v2) and meet the designated specifications.</p>	<b>Pass</b>

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

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24 Jan 2023



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