Product Name: NEBridge® Golden Gate Assembly Kit (BsmBI-v2)
Catalog Number: E1602S
Packaging Lot Number: 10187121
Expiration Date: 01/2025
Storage Temperature: -20°C
Specification Version: PS-E1602S/L v3.0

NEBridge® Golden Gate Assembly Kit (BsmBI-v2) Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>N0309AAVIAL</td>
<td>pGGAselect Destination Plasmid</td>
<td>10176100</td>
<td>Pass</td>
</tr>
<tr>
<td>M2617AVIAL</td>
<td>NEBridge® Golden Gate Enzyme Mix (BsmBI-v2)</td>
<td>10176099</td>
<td>Pass</td>
</tr>
<tr>
<td>B0202SVIAL</td>
<td>T4 DNA Ligase Reaction Buffer</td>
<td>10153865</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Assay Name/Specification

* Individual Product Component Note

Standard Quality Control Tests are performed for each component included in NEBridge® Golden Gate Assembly Kit (BsmBI-v2) and meet the designated specifications.

Functional Testing (Golden Gate Assembly)

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 lacIz and 1 µl NEBridge® 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 lacIz 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 >250 colonies and >80% blue colonies when 5% of the outgrowth is spread on an IPTG/ Xgal/Chloramphenicol plate and incubated overnight at 37°C.

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.
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24 Jan 2023

Josh Hersey  
Packaging Quality Control Inspector  
26 Apr 2023