New England Biolabs
Product Specification

Product Name:  NEB® Golden Gate Assembly Kit (BsmBI-v2)
Catalog #:   E1602S/L
Kit Components:  NEB® Golden Gate Enzyme Mix (BsmBI-v2) (M2617)
pGGAselect Destination Plasmid (N0309)
T4 DNA Ligase Reaction Buffer (B0202)

Shelf Life:   24 months
Storage Temp: -20°C
Specification Version: PS-E1602S/L v1.0
Effective Date: 20 Dec 2019

Assay Name/Specification (minimum release criteria)

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 LacI/lacZ and 1 µl Golden Gate Enzyme Mix (BsmBI-v2) containing T4 DNA Ligase (750U) and BsmBI-v2 (30U) 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 lacZ 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.

* Individual Product Component Note - Standard Quality Control Tests are performed for each component included in NEB® Golden Gate Assembly Kit (BsmBI-v2) and meet the designated specifications.

Derek Robinson
Director of Quality Control

Date 20 Dec 2019