

30% OFF

Expires Dec 31st, 2023

NEBridge Golden Gate Assembly Kits

50+ fragment DNA assembly achievable with high efficiency and accuracy!

Perform single insert cloning in just 5 minutes using our fast protocols

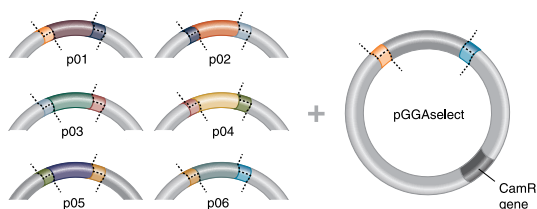
Clone seamlessly, with no scars remaining after assembly

Assemble multiple fragments (2–50*) in order, in a single reaction

Use with a broad range of fragment sizes (<100 bp to >15 kb)

Generate libraries with high efficiencies

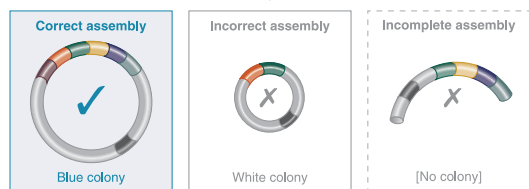
Golden Gate Assembly Workflow for both Simple and Complex Assemblies



Can be used in complex (50*) fragment assemblies

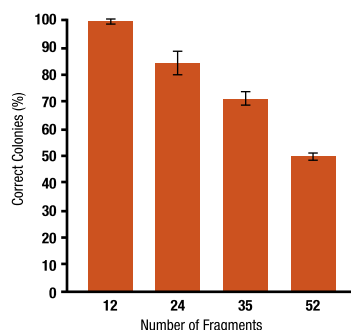
Single-tube reaction

- Bsal-HFv2 or BsmBI-v2
- T4 DNA Ligase
- 5 min. at 37°C (for Bsal-HFv2) or 42°C (for BsmBI-v2)
- 5 min. at 16°C (x 30–60 cycles)
- 5 min. at 60°C



In its simplest form, Golden Gate Assembly requires a Type IIS recognition site, added to both ends of a dsDNA fragment. After digestion, these sites are left behind, with each fragment bearing the designed 3- or 4-base overhangs that direct the assembly.

Fidelity vs. Complexity of Golden Gate Assembly



The percentage of colonies harboring correctly assembled constructs is shown for one-pot Golden Gate Assembly reactions containing: 12, 24, 35 and 52 fragments. Error bars depict the standard deviation of at least 3 experimental replicates; this data has been reported in several recent manuscripts:

NEBridge Golden Gate Assembly Kits (BsmBI-v2 or Bsal-HFv2)

The absence of internal sites in a sequence determines the choice of which Type IIS restriction enzyme to drive the assembly. For your convenience, NEB now offers two kits for Golden Gate Assembly featuring Bsal-HFv2 or BsmBI-v2 (a destination plasmid with T7/SP6 promoters is also included). Both kits incorporate digestion followed by ligation with T4 DNA Ligase into a single reaction, and can be used to assemble 2-50+ fragments in a single step.

Try NEBridge® Ligase Master Mix for Added Flexibility

NEBridge Ligase Master Mix is a 3X master mix for Golden Gate Assembly. Designed for use with NEB Type IIS restriction enzymes, this master mix contains T4 DNA Ligase in an optimized reaction buffer with a proprietary ligation enhancer. Users need only choose their preferred NEB Type IIS restriction enzyme and add DNA substrates to be assembled. Low complexity single fragment insertions, as well as moderate complexity (3–6 fragment) and high complexity (7–25+ fragment) assemblies, are all supported with this optimized reagent and accompanying protocols.

Type IIS Restriction Enzymes used in Golden Gate Assembly

Type IIS restriction enzymes recognize asymmetric DNA sequences and cleave outside of their recognition sequence. Type IIS enzymes commonly used in Golden Gate Assembly are listed below. NEB currently offers over 50 Type IIS restriction enzymes.

	NEB#	LIST PRICE	PROMOTIONAL PRICE*
NEBridge® Golden Gate Assembly Kit (Bsal-HF® v2)	E1601S	\$238	\$166.60
	E1601L	\$635	\$444.50
NEBridge® Golden Gate Assembly Kit (BsmBI-v2)	E1602S	\$238	\$166.60
	E1602L	\$635	\$444.50
NEBridge® Ligase Master Mix	M1100S	\$135	\$94.50
	M1100L	\$539	\$377.30
BsmBI-v2	R0739S	\$113	\$79.10
	R0739L	\$463	\$324.10
Bsal-HF® v2	R3733S	\$107	\$74.90
	R3733L	\$444	\$310.80
Esp3I	R0734S	\$117	\$81.90
	R0734L	\$537	\$375.90
BbsI	R0539S	\$107	\$74.90
	R0539L	\$440	\$308.00
BbsI-HF®	R3539S	\$107	\$74.90
	R3539L	\$223	\$156.10
	R3539M	\$440	\$308.00



Try our NEBridge Ligase Fidelity Tools for the design of high-fidelity Golden Gate assemblies at ligasefidelity.neb.com



For help designing primers, try the NEBridge Golden Gate Assembly Tool at GoldenGate.neb.com

For more information visit: www.neb.ca/neb-seamless-cloning-nebridge-24



*TERMS & CONDITIONS: Offer valid in Canada only. Expires Dec 31st, 2023. Discount is eligible for products listed on this flyer. Purchase can be made online at www.neb.ca or through a NEB freezer program. Eligible products get discounted automatically when added to cart. Promotion not valid for cash or cash equivalent towards purchase(s). No substitutions. Offer may not be applied to existing, pending or prior orders. Cannot be combined with any other promotion or discount. One or more of these products are covered by patents, trademarks and/or copyrights owned or controlled by New England Biolabs, Inc. For more information, please email us at orders.ca@neb.com

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be INSPIRED
drive DISCOVERY
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