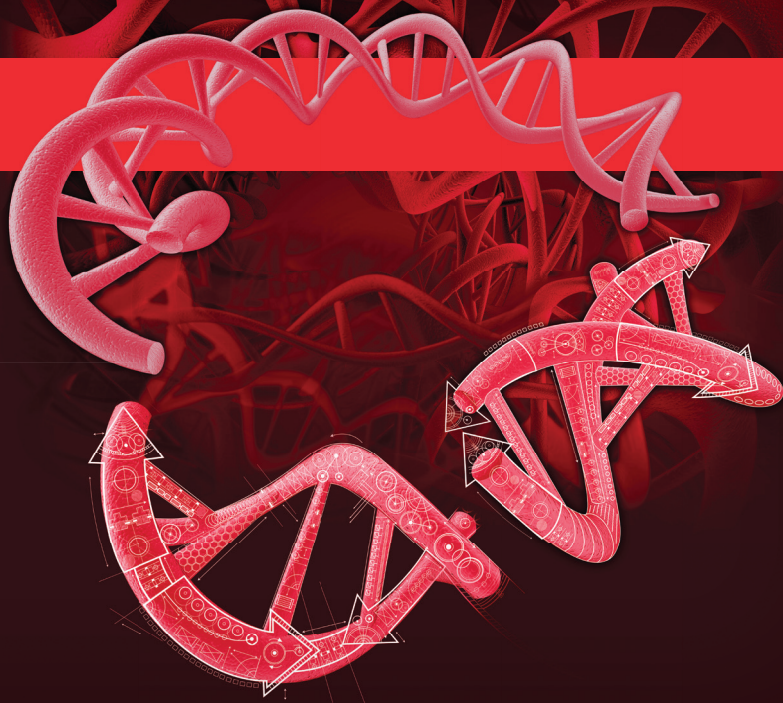


GeneArt Type IIs Assembly Kits



Discover the next generation of cloning and assembly

Invitrogen™ GeneArt™ Type IIs Assembly Kits utilize Type IIs restriction enzymes to enable seamless cloning and assembly of up to eight DNA fragments by simultaneous cleavage and ligation in a single reaction. Since Type IIs assembly is not based upon homologous recombination, there is minimal risk of rearrangements, and minimal confirmation of your final construct's sequence is required.

GeneArt Type IIs Assembly Kits enable you to:

- Assemble DNA fragments, such as Invitrogen™ GeneArt™ Strings™ DNA Fragments and Libraries, in any order into any compatible vector, without scars
- Avoid homologous recombination and associated rearrangements when cloning homologous or repetitive sequences
- Create your own cloning and expression vectors with custom elements for affordable and flexible vector construction
- Minimize the sequence confirmation of the final construct
- Choose from three Type IIs enzymes (AarI, BsaI, and BbsI), with each kit containing enough enzyme/ligase mix, cloning vector, and cloning controls for 10 reactions

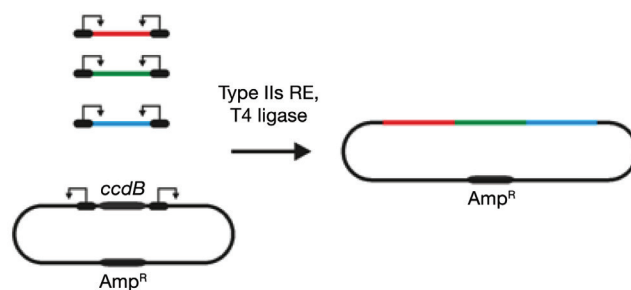


Figure 1. An example of cloning 3 DNA fragments into a single vector using Type IIs assembly. The black arrows indicate the orientation of the Type IIs restriction enzyme sites, pointing towards the cleavage sites.

Ordering information

Product	Cat. No.
GeneArt Type IIs Assembly, AarI	A15916
GeneArt Type IIs Assembly, BsaI	A15917
GeneArt Type IIs Assembly, BbsI	A15918

invitrogen

Clone single or multiple DNA fragments, without scars

With GeneArt Type IIs Assembly Kits, you can assemble GeneArt Strings DNA Fragments, GeneArt™ Precision TALs, gene variants, and repetitive or small sequences.

Cloning efficiency, as defined by correct inserts, order, and orientation

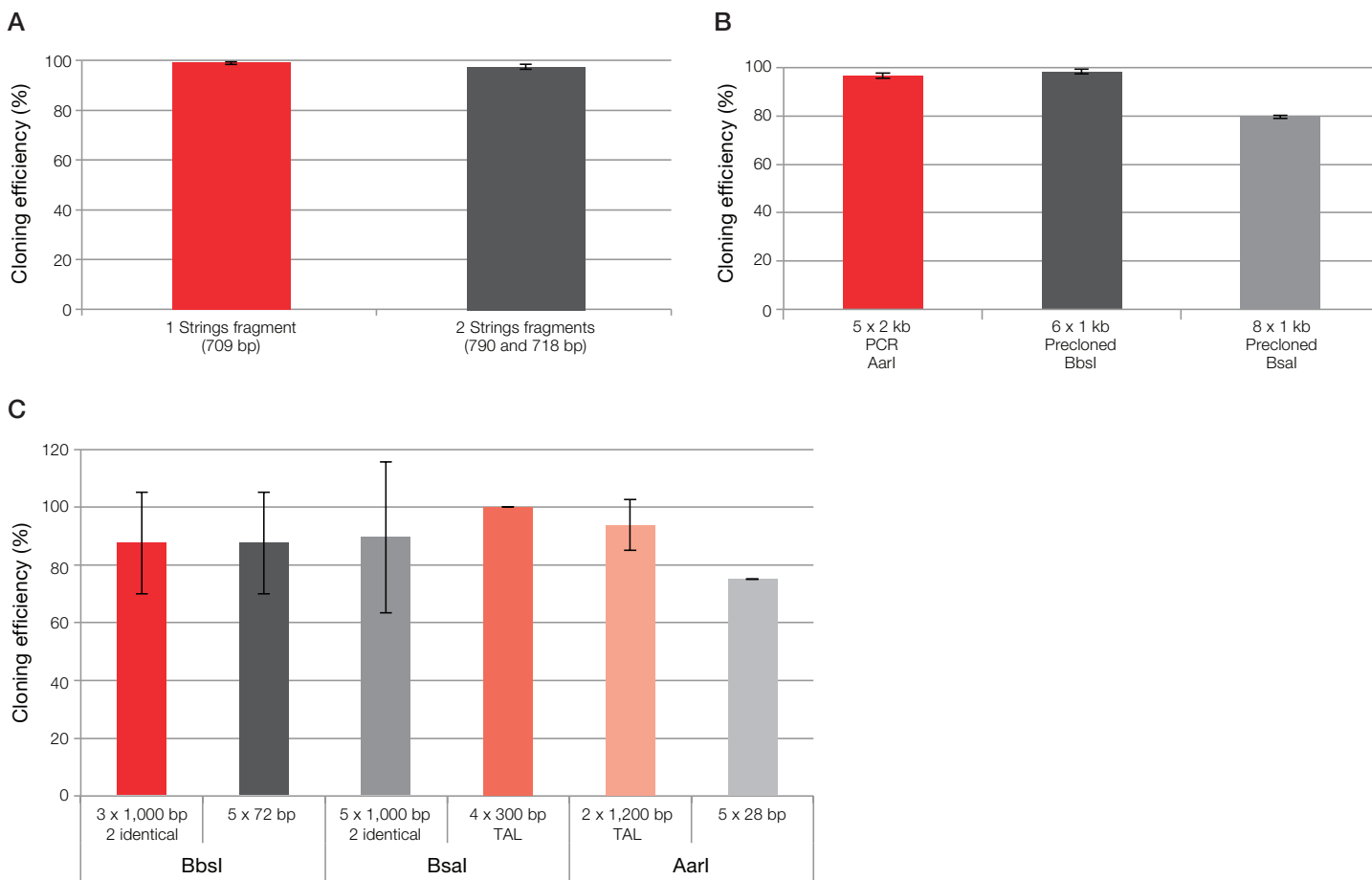


Figure 2. GeneArt Type IIs Assembly Kits with various types of DNA inserts. For each, cloning efficiency is defined by the correct inserts in the correct order and orientation, not the number of colonies. **(A)** Assembly of GeneArt Strings DNA Fragments, using AarI. **(B)** Assembly of PCR products, direct or precloned. **(C)** Assembly of repetitive sequences (such as TAL binding domains or identical sequences) or small sequences.

Find out more at thermofisher.com/typeiis or
geneartsupport@thermofisher.com

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