

The online ordering portal for GeneArt Instant Designer

Quick reference guide

The Invitrogen™ GeneArt™ Instant Designer online ordering portal offers a refreshingly simple way to enter, edit, optimize, and order your gene synthesis projects. This intuitive tool also gives you a choice between our Value and Prime Gene Synthesis services. The Value Gene Synthesis service is ideal for non-complex sequences, so you can still receive 100% sequence-verified genes at affordable prices without a promotion code.

To help you get started with your projects, this quick reference guide* provides you with important tips and highlights some of the features. Get more information and access the GeneArt Instant Designer tool and our Value and Prime Gene Synthesis services at [thermofisher.com/genesyntesis](https://www.thermofisher.com/genesyntesis).

1. Load—start a new project

- To start a new project, drag and drop your FASTA sequence(s) into the portal, or upload one or more from a file manager (Figure 1). You also have the option to create a sequence by manual entry.
- Next, you'll be presented with the option to select a host organism for optimization (Figure 2). If desired, the "Host Organism" dropdown at the top can quickly apply the same host for all sequences, or you can choose a host for each one, separately. For DNA sequences, you have the option to skip this step.
- After loading, the sequences are displayed in a row format with options for our Value or Prime Gene Synthesis services and the corresponding production time and price (Figure 3). You can easily change the name of the project or sequence by clicking on the three dots by the given project or sequence title.
- If you don't require any further optimization, simply click the service level you require—Value or Prime Gene Synthesis—and proceed to ordering step 4.
- The Vector & Deliverable column shows our standard vector (pMX) as the default option in which your gene will be cloned, and a lyophilized plasmid DNA option. Our pMX vector originates from pUC-based cloning vectors and is not recommended for expression. Clicking on the pencil icon allows you to add a resistance marker and change to an expression vector such as pcDNA3.4-TOPO or pDONR221 for entry into the Invitrogen™ Gateway™ cloning system. You can also add a plasmid prep (such as midiprep or maxiprep) and request research-grade or transfection-grade DNA depending on your needs.

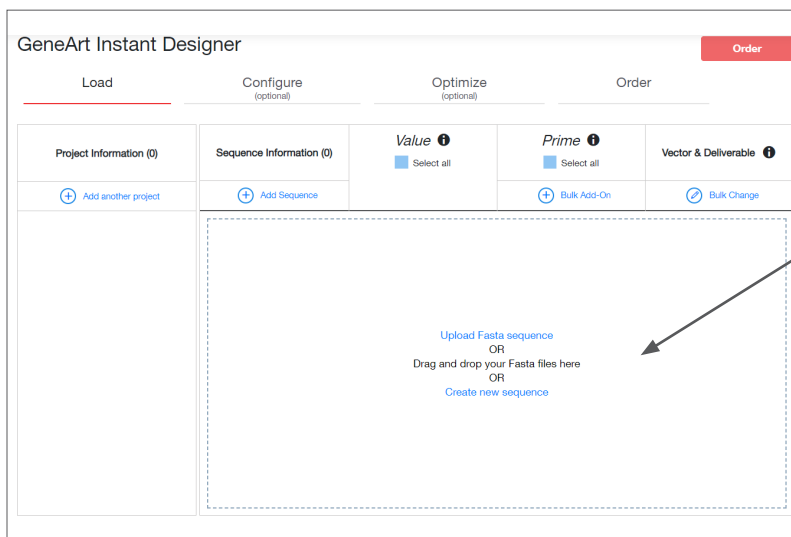


Figure 1. Opening screen of the GeneArt Instant Designer portal. Simply drag and drop, find, or create a sequence to get started.

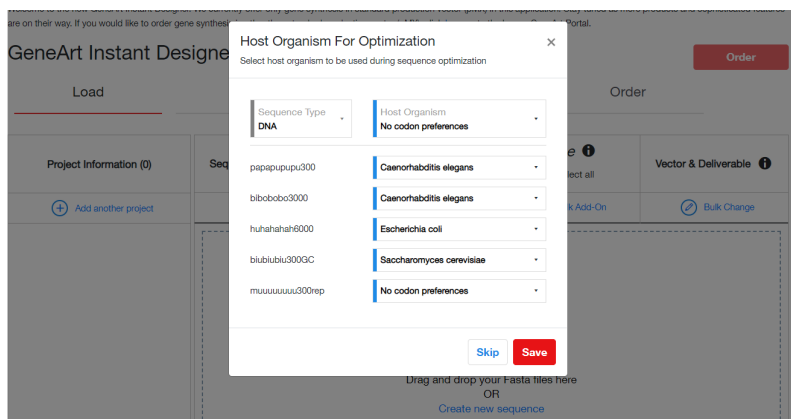


Figure 2. Adding a host organism for optimization. Simply apply a host organism to all sequences in the project, or select individual options.

3. Optimize (optional)

- The “Host Organism” dropdown allows you to optimize a sequence for a certain species (in case you didn’t do so during the “Load” step) (Figure 5). The sequence can be edited by left-clicking on the sequence and dragging the cursor or clicking on the amino acid symbol to invoke the edit option.
- You have the option to define an open reading frame (ORF) region manually or select from ranges (Figure 5).
- You also have the option to protect your cloning sites, add protected regions, and add or select motifs to avoid.

4. Order

- The “Order” tab allows you to review your choices before adding them to your cart. Select Value or Prime Gene Synthesis services for all or selected sequences, add on any services (e.g., express shipping), or go back and optimize sequences.
- Before adding an order to your cart, you can download a summary of all of your projects and sequences.
- If any sequences were loaded but were not selected for ordering, the GeneArt Instant Designer will alert you that these sequences will be moved to a separate project (Figure 6).
- Click “Add to Cart” to see your final price and begin the checkout process.

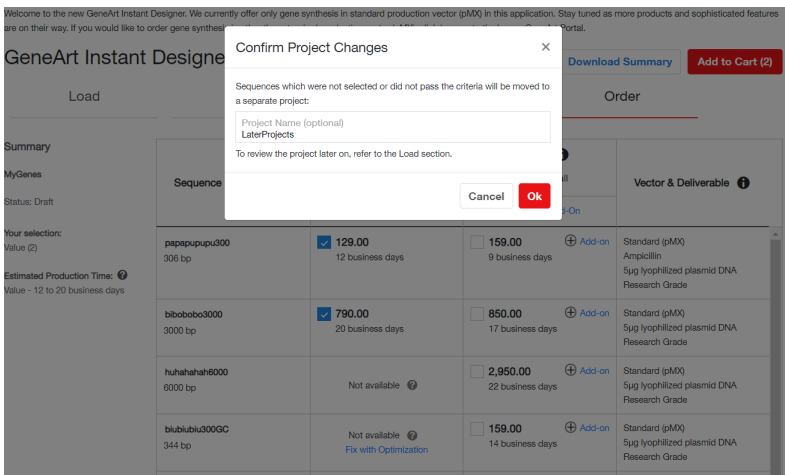


Figure 6. Dialog box alerting you that any sequences not selected for ordering will be moved to a different project for later.

The GeneArt Instant Designer portal gives you the flexibility and power to load, modify, review, and order your sequences quickly and efficiently.

Looking for GeneArt Strings DNA Fragments?

If you need to order Invitrogen™ GeneArt™ Strings™ or High-Q Strings™ DNA Fragments, visit thermofisher.com/strings

* All sequences shown here are for demonstration purposes only, and associated prices do not have their currency shown. For accurate pricing and production times, please log in with your account.

Find out more at thermofisher.com/genesyntesis

ThermoFisher
SCIENTIFIC

For Research Use Only. Not for use in diagnostic procedures. © 2020 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. COL111658 0420