MolBreeding AutoGBTS Design Tool User Guide

Welcome to MolBreeding Biotechnology's AutoGBTS Panel Design Tool!
This free automated platform helps you efficiently design panels for GBTS using either hybrid capture or multiplex PCR technologies.

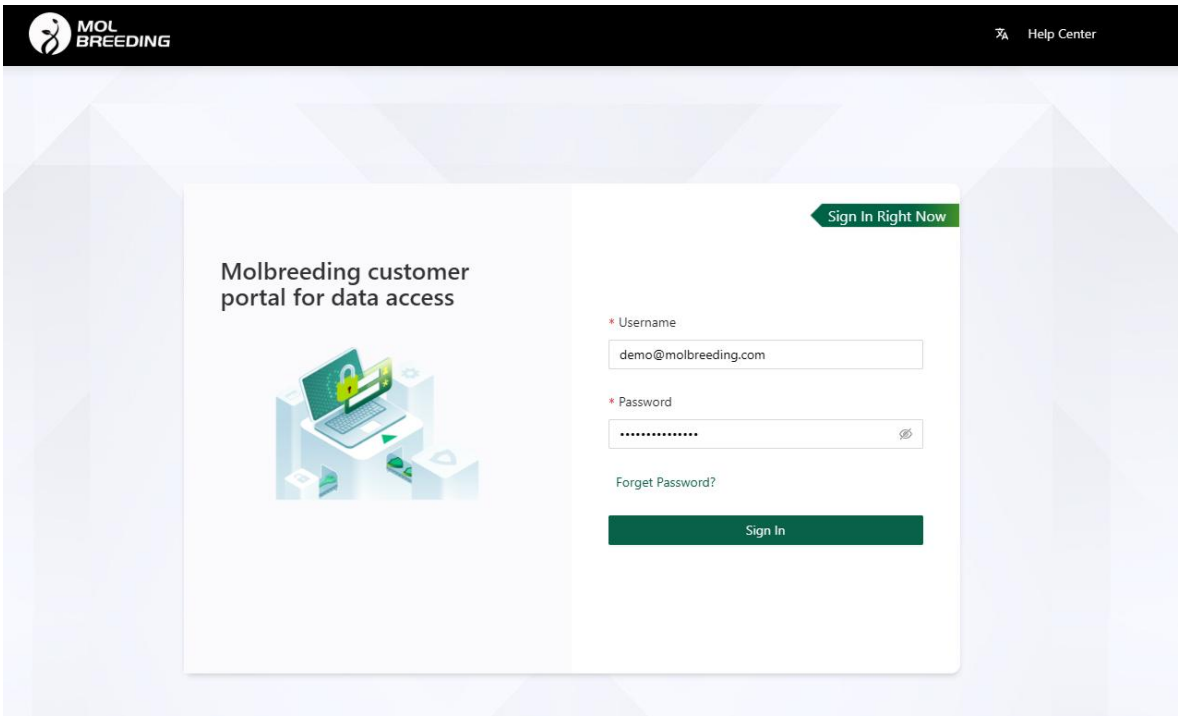
1. Register your private account on Customer Portal

If you already have an account, please go to **Step 2** directly.

If you do **not** have an account on our customer portal, please contact Customer Support cs@molbreeding.com to register. Include your name, institution, email address, and a brief description of your project needs. Our team will review the request and send your account activation details (typically within **24** hours).

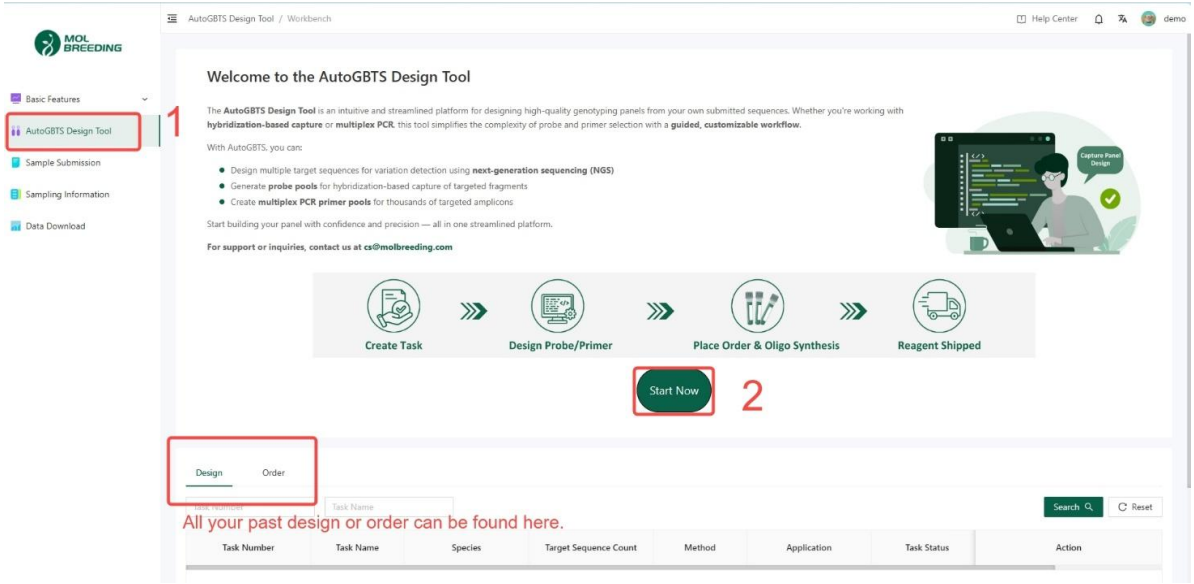
2. Log in to Customer Portal

After you receive the activation email, go to Sign In - BigDataBreeding, and log in with your account with your username and default password provided.



3. Access the AutoGBTS Design Tool

In the left panel, click “AutoGBTS Design Tool.”
On the page that opens, click **“Start Now”** to open the below Design Request Form.

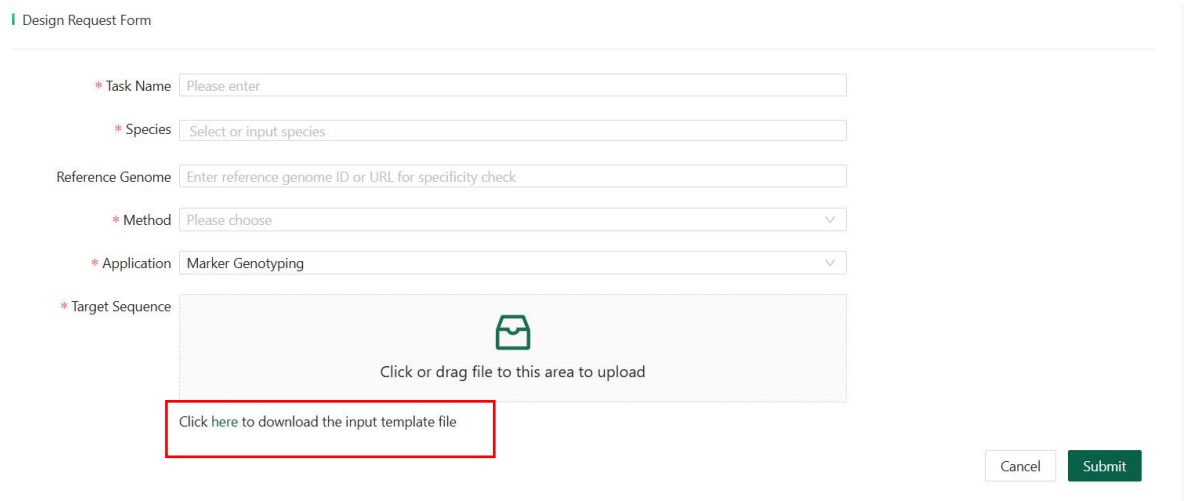


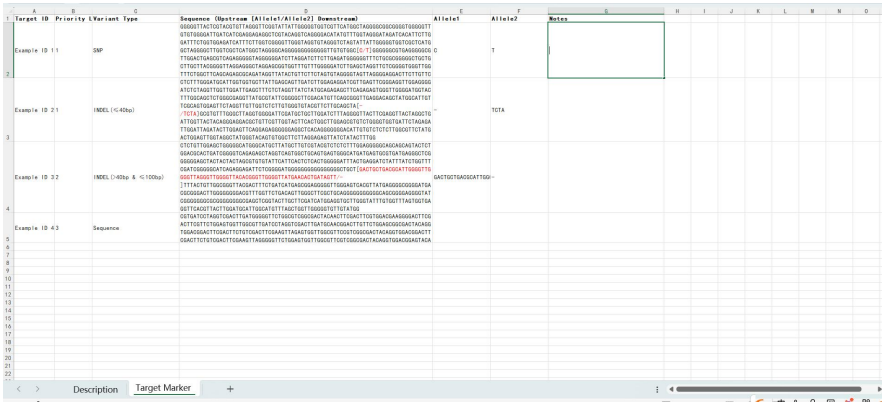
4. Fill in the Task Details

Complete the form with your project information, including **task name**, **sample species**, and **reference genome**, etc.

- **Method**: Select your preferred design method: “*Hybridization Capture*” or “*Multiplex PCR*”.
- **Application**: Choose whether your targets are for “*Marker Genotyping*” (detecting marker variation) or “*Gene Editing Testing*” (detecting editing sites).

IMPORTANT: Download the input template (picture below) and fill in your target sequence information.



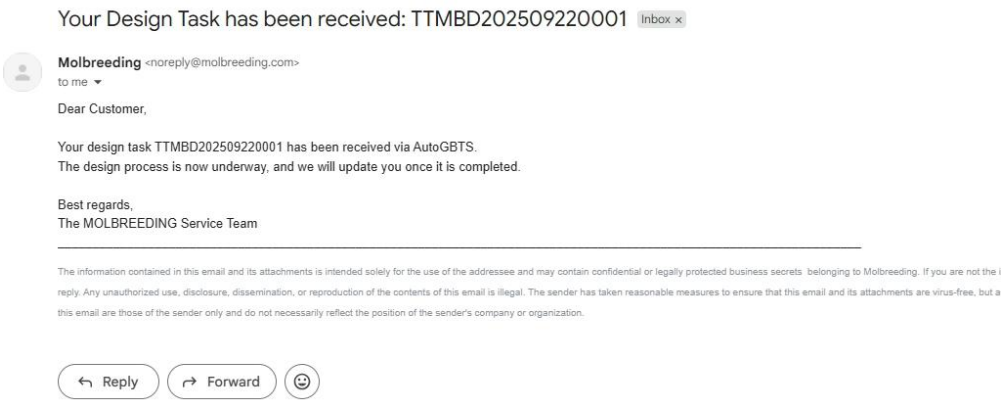


Tip: Ensure files are unprotected and follow the template format for seamless processing. Uploaded data is securely stored in your account.

5. Email Confirmation

After filling in all required information, upload your target sequence file and submit your design. You should receive a confirmation email shortly after submission. (If you don't see it, please check your spam folder.)

The design process typically takes **0-5 days** to complete, depending on the number of targets and the size of the reference genome. You will receive an email notification once the design is completed.

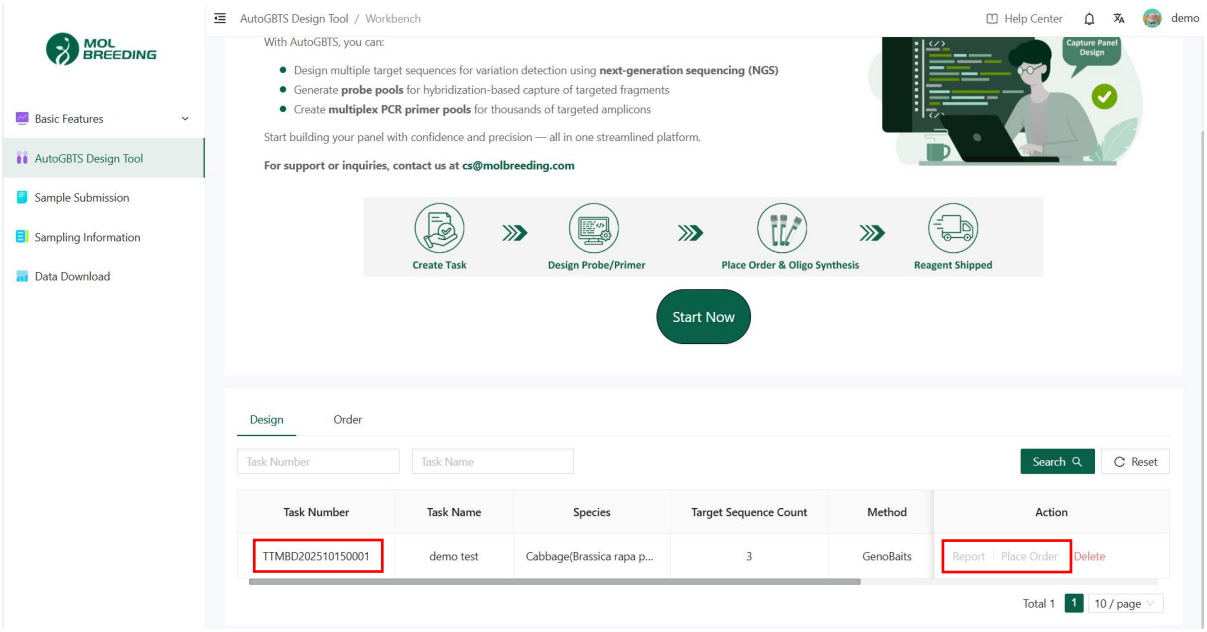


6. Review Your Design Result

Once submitted, your design task will appear on the AutoGBTS Design Tool homepage. Under the Design section, you can:

- Monitor the task status and progress at any time
- Download and review the design report

If everything looks good, click "Place Order" to proceed with oligo synthesis.



- Illustration of Probe Design Report:

Probe Design Report

1. Base Information

Task Number	TTMBD202509220001	**Email**	demo@molbreeding.com
Task Name	demo test	**Species**	Cabbage(Brassica rapa pekinensis)
Submission Time	2025-09-01 08:18:39	**Company/Institute**	/
Completion Time	2025-09-02 01:19:48	**Reference Genome**	https://www.ncbi.nlm.nih.gov/datasets genome/

2. Target Probe Design Summary

Design Summary of Loci

Variant Type	Total Targets	Targets with Successful Design	Probes Count	Design Rate(%)
SNP	3	3	3	100.0
Total	3	3	3	100.0

3. Target Probe Design Detail

Item	Target ID	Variant Type	Target Length(bp)	Probes Count	Coverage per Target(%)
1	Example ID 1	SNP	1	1	100.0
2	Example ID 2	SNP	1	1	100.0
3	Example ID 3	SNP	1	1	100.0

7. **Order Oligo Synthesis**

   After you place the order, our project manager will prepare a **quotation** for your review.

   The reagents are typically **delivered within 7–14 days** after payment confirmation.

   Tip: Reagent orders are charged, but the design process is completely free. Contact support for quote consultations before submitting.

For any other questions, please contact your project manager or cs@molbreeding.com.