

Instructions for Promoter Directed Evolution

Promoter Directed Evolution

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Step by step instruction

A vertical list of steps for the Promoter Directed Evolution process. The first step, 'Input promoter sequence (last 50bp)', is completed with a blue checkmark. The second step, 'Input mutation region', is active and includes a 'Start from' field with the value '10' and an 'End with' field with the value '40'. Below these fields are 'CONTINUE' and 'CANCEL' buttons. The remaining steps are: 'Input the number of mutated bases', 'Input the number of mutated sequences', 'Input the number of selected sequences', and 'Input your email address'. At the bottom of the form are 'BEGIN EVOLUTION' and 'EXIT' buttons.

- ✓ Input promoter sequence (last 50bp)
- 1 Input mutation region
 - Start from 10 — End with 40
 - CONTINUE CANCEL
- 2 Input the number of mutated bases
- 3 Input the number of mutated sequences
- 4 Input the number of selected sequences
- 5 Input your email address

BEGIN EVOLUTION EXIT

- ① Follow the prompts on the web page and enter the required parameters step by step, clicking the continue button after each item to move on to the next item.
- ② Once all the parameters have been entered, click the “Begin Evolution” button.

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Check all the information

A form to review the input parameters. It includes labels for each parameter and the values entered: 'Input promoter sequence (last 50bp)' with the sequence 'ATCGACGTACGACATATCGCTACTGTAGCATCGTTTGAAACGTG'; 'Input mutation region' with 'Start from 10' and 'End with 40'; 'Input the number of mutated bases' with the value '5'; 'Input the number of mutated sequences' with the value '10000000'; 'Input the number of selected sequences' with the value '20'; and 'Input your email address' with the email 'xxx@gmail.com'. At the bottom are 'BEGIN EVOLUTION' and 'EXIT' buttons.

Input promoter sequence (last 50bp)
Promoter sequence input
ATCGACGTACGACATATCGCTACTGTAGCATCGTTTGAAACGTG

Input mutation region
Start from 10 — End with 40

Input the number of mutated bases
Number of mutated bases input
5

Input the number of mutated sequences
Number of mutated sequences input
10000000

Input the number of selected sequences
Number of selected sequences input
20

Input your email address
Email
xxx@gmail.com

BEGIN EVOLUTION EXIT

- ③ At this time, you will have the opportunity to check all the information. If the input is wrong, you can still correct it.
- ④ After confirming that there is no error, click the “Begin Evolution” button again.

Promoter Directed Evolution

Check all the information

Input promoter sequence (last 50bp)

Promoter sequence input

ATCGACGTACGAGCATGCATATGCGTACTGTAGCATCGTTTGAAACGTG

Input mutation region

Start from

10

End with

40

Input the number of mutated bases

Number of mutated bases input

5

Input the number of mutated sequences

Number of mutated sequences input

10000000

Input the number of selected sequences

Number of selected sequences input

20

Input your email address

E-mail

xxx@gmail.com

BEGIN EVOLUTION

EXIT

✓ Results will be sent to your email after the optimization is finished.

✕

- ⑤ The page will appear a prompt “Results will be sent to your email after all the optimization is finished.”