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🌐 Polymerase chain reaction (PCR) V.6

Shuning Guo[1]

[1]2021 iDEC NEFU_China

Version 6 ▼
Oct 05, 2021

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dx.doi.org/10.17504/protocols.io.bysrpwd6

2021 iDEC NEFU_China

Shuning Guo

ABSTRACT

This protocol is used to amplify target DNA fragment for plasmid construction or other use.

DOI

dx.doi.org/10.17504/protocols.io.bysrpwd6

PROTOCOL CITATION

Shuning Guo 2021. Polymerase chain reaction (PCR). **protocols.io**
https://dx.doi.org/10.17504/protocols.io.bysrpwd6
Version created by Shuning Guo

CREATED

Oct 05, 2021

LAST MODIFIED

Oct 05, 2021

PROTOCOL INTEGER ID

53809

MATERIALS TEXT

2×High Fidelity Master Mix (MCLAB)/2×Rapid Master Mix (Vazyme)
ddH2O
Template
F/R Primer
Thermo cycler.

SAFETY WARNINGS

Please wear gloves for the experiment, don't try to touch the lid after PCR program initiation.

BEFORE STARTING

Set up a small box with ice, put DNA and 2×high Fidelity Master Mix (MCLAB)/or 2×Rapid Master Mix (Vazyme) into it before going into the thermocycler.

1   Choose one case from the cases below.
    Step 1 includes a Step case.
    Simple PCR for amplifying target DNA fragments

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step case

Simple PCR for amplifying target DNA fragments

2 Add the following reagent to a PCR tube.(50 µl).

A	B
2×High Fidelity Master Mix (MCLAB)	25 µl
Template	1 µl
Forward Primer (10 µM)	1 µl
Reverse Primer (10 µM)	1 µl
ddH2O	22 µl

3 Program the thermocycler as follows:

A	B
Temperature	Time
95/98℃	5 min
95/98℃	30 s
Tm-3~5℃	30 s
72℃	1kbp/min
72℃	5~10 min
16℃	∞

Repeat 30 times in 3-5 steps

4 Use the palm centrifuge to mix the solution in PCR tube.

5 Put the PCR tube into the thermocycler and Run the program.

6 Using agarose gel electrophoresis to confirm if correct construct was present.